

# 2019-20 Ohio Deer Summary

## Our Deer Management Strategy

The goal of Ohio's deer program is to provide a deer population that maximizes recreational opportunities including viewing, photographing, and hunting, while minimizing conflicts with agriculture, motor travel, and other areas of human endeavor. This has been the Division of Wildlife's goal for over 50 years. Historically, farmer and rural landowner attitude surveys have been used to establish population goals for most counties. While the Division of Wildlife believes these goals represent a reasonable compromise concerning appropriate deer population levels, we have updated population goals using a combination of farmer and hunter surveys, with the most recent round completed during the summer of 2019. Maintaining the deer population at or near goal is accomplished through harvest management.



OHIO DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF WILDLIFE

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### DID YOU KNOW?

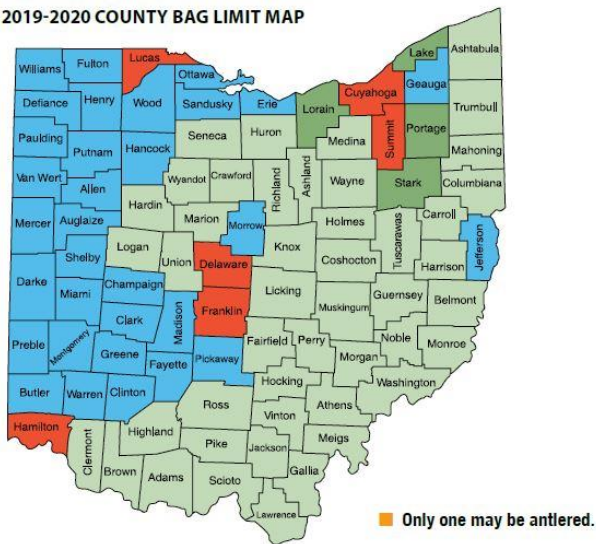
- From 2011-2015 hunters averaged 20 days pursuing deer – in 2019 deer hunters spent only 16 days afield.
- The percentage of adult bucks in the harvest has been increasing steadily since the mid-1990s. In 2019, more than 60% of the bucks harvested were at least 2 ½ years old (a new record), and nearly 30% were older than 3 ½.
- About one in 2,000 deer permit buyers (0.05%) actually filled their 6-deer bag limit in 2019.
- Nearly 24,000 free-ranging deer have been tested for CWD since 2002 and, to-date, none have tested positive for the disease.
- New regulations helped reduce the antlerless harvest on public land by an average of 41% in 2018 and 2019.

## SEASONS AND PERMITS

A valid hunting license (resident = \$19, nonresident = \$180.96, youth = \$10, senior = \$10) and a deer permit (resident either-sex = \$31.20, nonresident either-sex = \$76.96, deer management = \$15, youth = \$16, senior = \$12) are required to hunt deer in Ohio. Hunters could harvest up to six deer with a combination of either-sex and deer management permits (where valid, Figure 1); however, they were limited to one deer management permit per county. Deer management permits were valid only in 10 counties during the first nine weeks of the archery season, as well as during all Division of Wildlife controlled hunts. Deer harvested during controlled hunts (maximum of six) did not count against a hunter's statewide or county bag limits.

Figure 1. Harvest regulations for the 2019-20 season as presented in the Ohio Hunting and Trapping Regulations, Publication 5085.

2019-2020 COUNTY BAG LIMIT MAP



TWO DEER COUNTY	THREE DEER COUNTY	THREE DEER COUNTY	FOUR DEER COUNTY
A hunter may kill no more than <b>two</b> deer in a two deer county during the 2019-2020 season.	A hunter may kill no more than <b>three</b> deer in a three deer county during the 2019-2020 season.	A hunter may kill no more than <b>three</b> deer in a three deer county during the 2019-2020 season.	A hunter may kill no more than <b>four</b> deer in a four deer county during the 2019-2020 season.
Up to <b>two</b> either-sex permits.	Up to <b>three</b> either-sex permits.	Up to <b>two</b> either-sex permits and <b>one</b> deer management permit.	Up to <b>three</b> either-sex permits and <b>one</b> deer management permit.
Deer management permits are <b>NOT</b> valid.	Deer management permits are <b>NOT</b> valid..	- OR - Up to <b>three</b> either-sex permits.	- OR - Up to <b>four</b> either-sex permits.

As always, hunters were limited to one antlered deer and had the opportunity to hunt deer during Ohio's four seasons, including archery (Sep. 28, 2019 - Feb. 2, 2020), gun (Dec. 2 - Dec. 8, 2019), bonus gun (Dec. 21-22, 2019), and muzzleloader (Jan. 4-7, 2020). Youth (17 and under) season was Nov. 23-24, 2019.

The Division of Wildlife issued 393,367 deer permits during the 2019-20 license year, 1.5 percent fewer than last year and the tenth consecutive year that sales have declined (Table 1). Permit sales for 2019-20 were down more than 37% from the recent peak in 2009-10. The decreasing trend is likely due to several factors including fewer available permits. As noted, deer management permits were only valid in 10 counties in 2019-20. As a result, deer management permit sales were down 92% compared to the 2013-14 season (the last season that these permits were valid statewide). While the herd is growing (see "Understanding Population Trends" on page 21), deer populations in many areas are still smaller than they were in the mid-to late-2000s (Figure 2). Finally, and most notably, the number of deer permits issued is largely dependent upon the number of hunters participating. Since 2011 the number of individuals purchasing at least one deer permit has dropped from 359,000 to 288,000 – a 20% decline in just the last eight years (Figure 3).

Figure 2. Statewide buck harvest, 1977-2019.

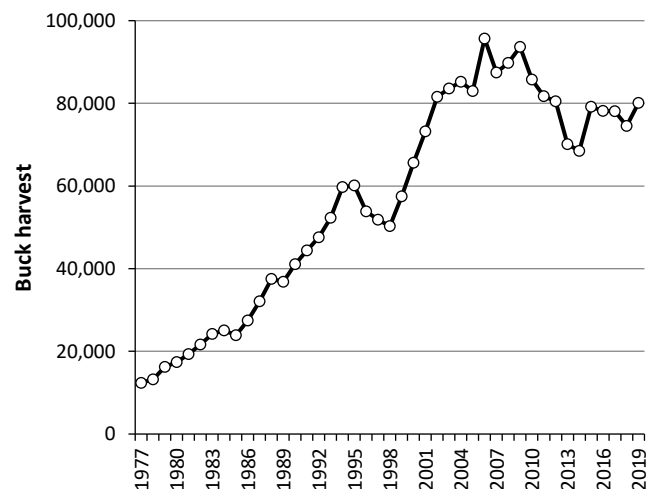


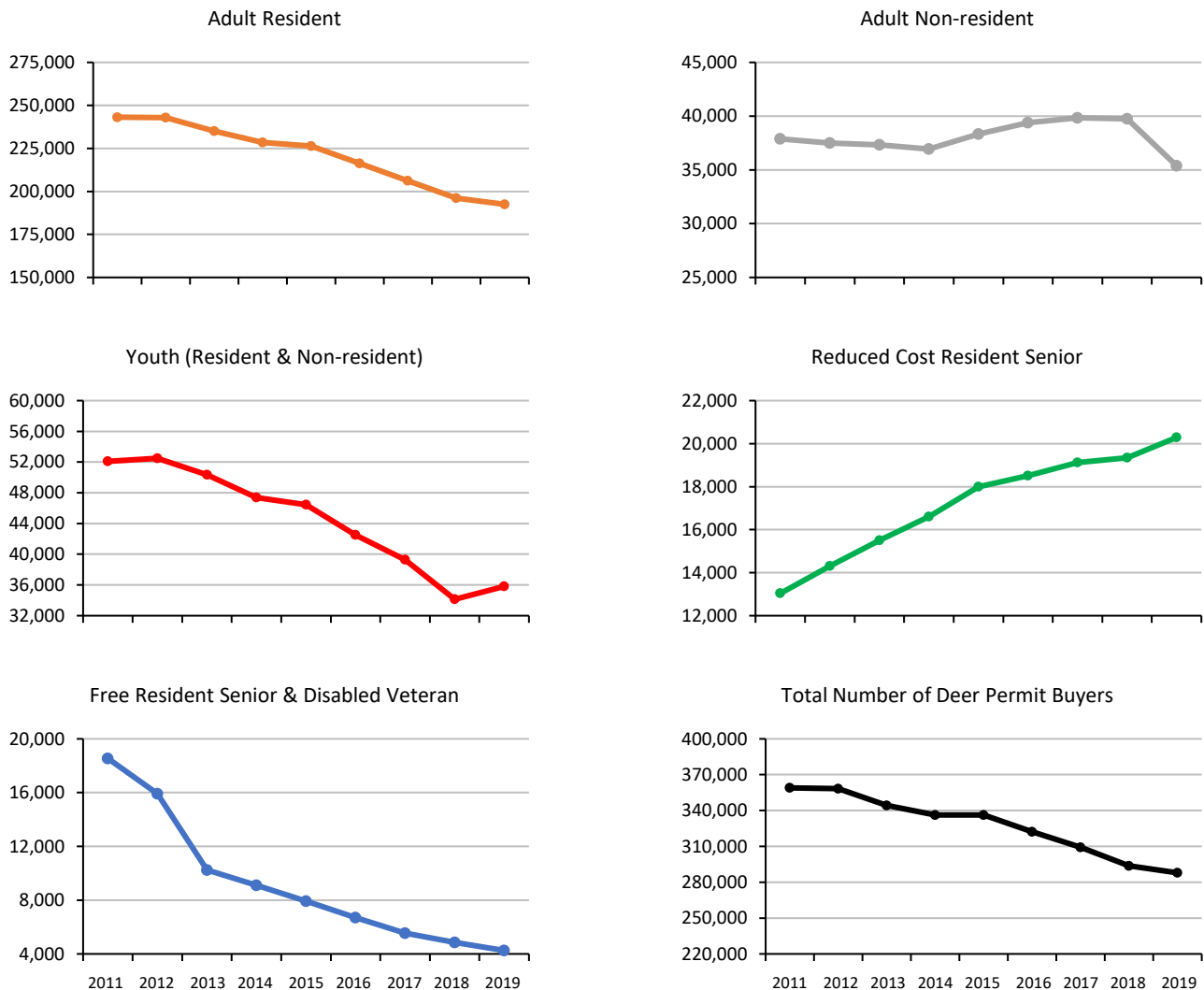
Table 1. Deer Permits Issued, 2007 - 2019.

Year	Permit			Total
	Youth	Either-Sex	Antlerless-only <sup>1</sup>	
2007-08	65,647	411,522	101,197	578,366
2008-09	67,338	396,704	147,400	611,442
2009-10	67,828	394,620	162,460	624,908
2010-11	66,300	380,462	162,655	609,417
2011-12	62,864	377,302	163,383	603,549
2012-13	64,634	397,333	126,918 <sup>2</sup>	588,885
2013-14	60,961	373,315	101,400	535,676
2014-15	58,227	378,921	57,230	494,378
2015-16	58,055	392,533	15,514	466,102
2016-17	52,706	373,791	18,669	445,166
2017-18	49,529	367,753	11,724	429,006
2018-19	42,781	345,408	11,117	399,306
2019-20	45,755	339,077	8,535	393,367

<sup>1</sup>Antlerless-only permits were renamed "Deer Management Permit" in 2019.

<sup>2</sup>Restrictions on the use of the antlerless permit began in 2012 and continued through 2019.

Figure 3. Number of permit buyers, by permit type, 2011 – 2019.



## HARVEST SUMMARY

Hunters harvested 184,468 deer during the 2019-20 season, just over 2% more than the three-year average (Table 2). The total includes 80,138 bucks, 87,578 does, and 16,752 button bucks. Coshocton County once again led the state with 6,715 deer killed. A harvest summary by season for the top five counties is presented in Table 3, and a complete harvest summary by county and season is available in Appendix 1.

The harvest total during the traditional statewide gun season was 63,567 deer, 4.6% less than the three-year average (Table 2). Coshocton, Tuscarawas, Muskingum, Ashtabula, and Knox counties led the state in gun harvest (Table 3). The bonus gun season harvest was 13,703 deer. Ashtabula County hunters led the way, harvesting 529 deer during the two-day season, with Coshocton (432), Tuscarawas (421), Knox (377), and Carroll (374) counties rounding out the top five.

Archers reported harvesting 88,106 deer, nearly 10% more than the three-year average (Table 2) and the second largest archery harvest on record. Archers accounted for a record 48% of the entire deer harvest, and for the seventh year in a row, more deer were taken during archery season than the week of gun season. By comparison, just 15 years ago the archery harvest only accounted for less than 30% of the annual harvest (Figure 4). This shift in the harvest is likely due to the ever-increasing interest and participation in archery hunting. In 1981, only about one-third of gun hunters also bowhunted. In 2019, nearly 70% of gun hunters also hunted the archery season.

Figure 4. Percent of the total annual deer harvest taken during the archery and traditional 7-day gun season, 1977-2019.

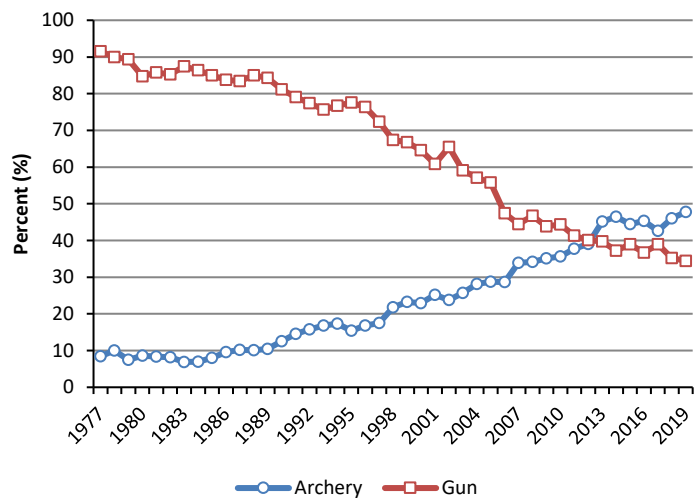


Table 2. Buck, doe, button buck, and total harvests by season, 2019-20 and three-year average<sup>1</sup>.

	Bucks <sup>2</sup>		Does		Buttons		Total		
	2019	3yr avg.	2019	3yr avg.	2019	3yr avg.	2019	3yr avg.	Diff. (%)
<b>Gun</b>									
Traditional (7-day)	23,147	25,313	33,522	33,463	6,898	7,853	63,567	66,629	-4.6
Bonus (2-day)	4,036	3,455	8,164	6,140	1,503	1,373	13,703	10,969	24.9
Youth	3,133	3,228	2,419	1,916	697	658	6,249	5,802	7.7
<b>Total</b>	<b>30,316</b>	<b>31,996</b>	<b>44,105</b>	<b>41,520</b>	<b>9,098</b>	<b>9,884</b>	<b>83,519</b>	<b>83,401</b>	<b>0.1</b>
<b>Archery</b>									
Crossbow	31,256	25,665	23,777	21,087	4,483	4,429	59,516	51,181	16.3
Vertical Bow	14,564	14,313	12,280	12,755	1,746	2,065	28,590	29,132	-1.9
<b>Total</b>	<b>45,820</b>	<b>39,977</b>	<b>36,057</b>	<b>33,842</b>	<b>6,229</b>	<b>6,493</b>	<b>88,106</b>	<b>80,313</b>	<b>9.7</b>
<b>Muzzleloader</b>									
	3,160	4,200	6,322	8,630	1,139	1,606	10,621	14,436	-26.4
<b>Total</b>	<b>80,138</b>	<b>76,916</b>	<b>87,578</b>	<b>84,990</b>	<b>16,752</b>	<b>18,249</b>	<b>184,468</b>	<b>180,155</b>	<b>2.4</b>

<sup>1</sup>Average of 2016-17, 2017-18, and 2018-19 seasons.

<sup>2</sup>Includes bucks at least 1.5 years old with antlers less than three inches in length (2,282), and bucks with shed antlers (829).

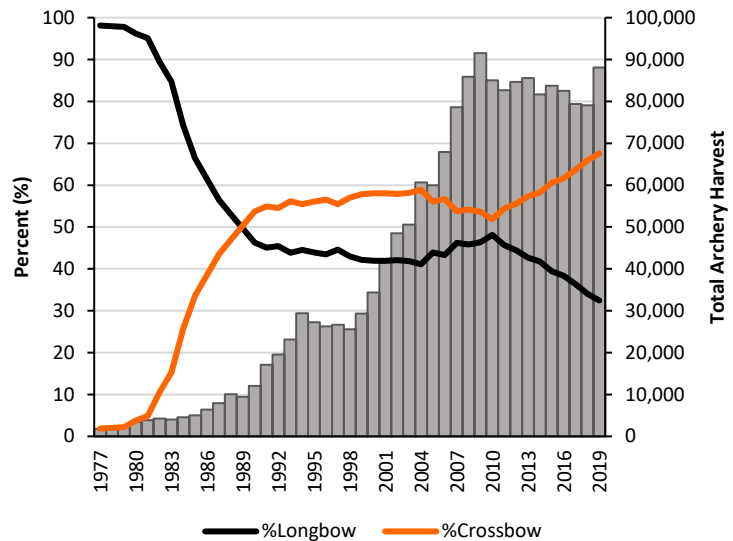
Table 3. Buck, doe, button buck, and total harvest by season for the top five counties, 2019-2020.

Season	County	Bucks*	Does	Buttons	Total	Rank	
						2019	2018
Gun	Coshocton	748	1,326	251	2,325	1	1
	Tuscarawas	678	1,205	246	2,129	2	3
	Muskingum	647	1,104	224	1,975	3	4
	Ashtabula	604	1,012	285	1,901	4	2
	Knox	594	957	223	1,774	5	6
Bonus Gun	Ashtabula	143	316	70	529	1	1
	Coshocton	118	270	44	432	2	3
	Tuscarawas	126	253	42	421	3	2
	Knox	95	238	44	377	4	4
	Carroll	85	249	40	374	5	6
Crossbow	Coshocton	1,093	941	126	2,160	1	1
	Tuscarawas	921	683	114	1,718	2	4
	Licking	937	672	91	1,700	3	2
	Ashtabula	672	659	188	1,519	4	3
	Holmes	704	656	115	1,475	5	7
Vertical Bow	Coshocton	548	456	60	1,064	1	1
	Tuscarawas	442	414	38	894	2	3
	Licking	417	347	34	798	3	2
	Muskingum	432	306	37	775	4	5
	Knox	330	365	32	727	5	4
Muzzleloader	Coshocton	116	245	31	392	1	1
	Muskingum	79	222	32	333	2	3
	Licking	96	187	37	320	3	5
	Tuscarawas	81	201	27	309	4	2
	Guernsey	91	173	28	292	5	4
Youth	Coshocton	117	116	30	263	1	1
	Tuscarawas	115	100	29	244	2	3
	Holmes	91	99	21	211	3	2
	Knox	93	85	24	202	4	4
	Ashland	76	74	18	168	5	14
Total	Coshocton	2,761	3,404	550	6,715	1	1
	Tuscarawas	2,382	2,894	505	5,781	2	2
	Ashtabula	1,785	2,479	685	4,949	3	3
	Muskingum	2,095	2,421	413	4,929	4	4
	Licking	2,166	2,335	377	4,878	5	5

\*Includes bucks at least 1.5 years old with antlers less than three inches in length and bucks with shed antlers.

Crossbow hunters harvested 59,516 deer, an increase of 16% over the three-year average (Table 2). Crossbows accounted for a record 68% of the archery harvest in 2019, continuing a trend that has been occurring over the last several years (Figure 5). Coshocton County led the state with 2,160 deer, followed by Tuscarawas, Licking, Ashtabula, and Holmes counties. The vertical bow harvest (compounds, recurves, and longbows) was 28,590 deer, nearly equivalent to the three-year average. Coshocton County archers led the state with a harvest of 1,064 deer. Tuscarawas, Licking, Muskingum, and Knox were the other top vertical bow harvest counties.

Figure 5. Total archery harvest and proportion taken by crossbows and longbows, 1977-2019.



There were 10,621 deer harvested during the four-day statewide muzzleloader season, 26% fewer than the three-year average harvest (Table 2). Coshocton County was the top spot for muzzleloader hunters with a harvest of 392 deer, followed by Muskingum, Licking, Tuscarawas, and Guernsey counties.

Youth hunters took 6,249 deer during the 2-day youth season, 7.7% more than the three-year average (Table 2). Top harvest counties for the two-day youth season were Coshocton, Tuscarawas, Holmes, Knox, and Ashland counties.

### Nonresident Hunters

Among permit buyers, nonresident hunters accounted for 10.5% of the deer permits issued, 10.5% of the harvest, and 17% of the antlered harvest in the 2019-20 season. Almost 15% of the nonresident harvest (2,050 deer) was taken on public land, which is nearly three times the rate of residents (5.8%). The nonresident harvest was 70% antlered. By comparison, the resident harvest was only 39% antlered. The top five nonresident states (by total harvest) were Pennsylvania (2,432), Michigan (1,625), West Virginia (1,265), North Carolina (996), and Florida (902). The top five counties for nonresident deer harvest were Pike (22.9%), Adams (20.3%), Athens (19.5%), Meigs (19.5%), and Morgan (17.8%).

More than two-thirds of the nonresident harvest (67%) occurred during archery season, with the gun and muzzleloader seasons accounting for an additional 23% and 7%, respectively (Table 4). Nonresidents took a much larger percentage of their harvest during archery season than either residents or landowners. Almost three-quarters (73%) of the antlered and over half of the antlerless deer harvested by nonresidents were taken during archery season.

Table 4. Percentage of antlered, antlerless, and total harvest by season, for adult residents, nonresidents, and landowners during the 2019-20 deer season.

	Antlered Harvest			Antlerless Harvest			Total Harvest		
	Resident	Non-resident	Landowner	Resident	Non-resident	Landowner	Resident	Non-resident	Landowner
<b>Archery</b>	59	73	59	44	52	38	50	67	46
<b>Gun</b>	31	20	33	39	31	45	36	23	41
<b>Bonus Gun</b>	6	2	5	10	4	10	8	3	8
<b>Muzzleloader</b>	4	5	3	7	13	7	6	7	5

## Landowners

Landowners reported harvesting 51,924 deer, just over 28% of the total harvest. The proportion of the harvest taken by landowners increased substantially from 1995 (19%) to 2005 (28%) but has remained between 26 and 28% of the total harvest since. While the total landowner harvest was nearly equally split between the gun (41%) and archery (46%) seasons, there was a notable difference in the timing of antlered and antlerless harvests. Most (59%) antlered deer were taken during the archery season (Table 4), but 62% of antlerless deer were taken in the firearms seasons. Landowner proportion of the total county harvest varied considerably across the state but was greatest among southeastern counties. Washington County led the state with landowners accounting for 43% of the total reported harvest. Landowners also accounted for a significant portion of the total harvest in Meigs (43%), Jackson (39%), Monroe (38%), and Gallia (38%) counties.

## Public Land

While public land only accounts for roughly 4% of the total land area in the state, resident and nonresident hunters reported harvesting 11,873 deer, 6.4% of the season total, on public land. Antlered bucks accounted for 46% of the public land harvest, slightly more than the proportion of antlered bucks in the private land harvest (41%). It is worth noting that the proportion of antlered bucks in the public land harvest increased substantially with the implementation of antlerless harvest restrictions in 2018. Prior to the public land antlerless restrictions, antlered deer comprised only 38% of the public land harvest – a bit lower than the average private land harvest (41%). With just over 80,000 acres of public land including the Wayne National Forest, Crown City Wildlife Area, and Dean State Forest, Lawrence County once again held the top spot for the proportion of harvest taken on public land (24%). The other top counties were Hocking (15.2%), Morgan (15.1%), Delaware (14.8%), and Muskingum (14.4%). Nonresident hunters accounted for more than 25% of the public land harvest in eight of the top 10 counties (Table 6).

Table 6. Public land and total harvest, by residency status, in the top 10 counties for public land acreage during the 2019-20 deer season.

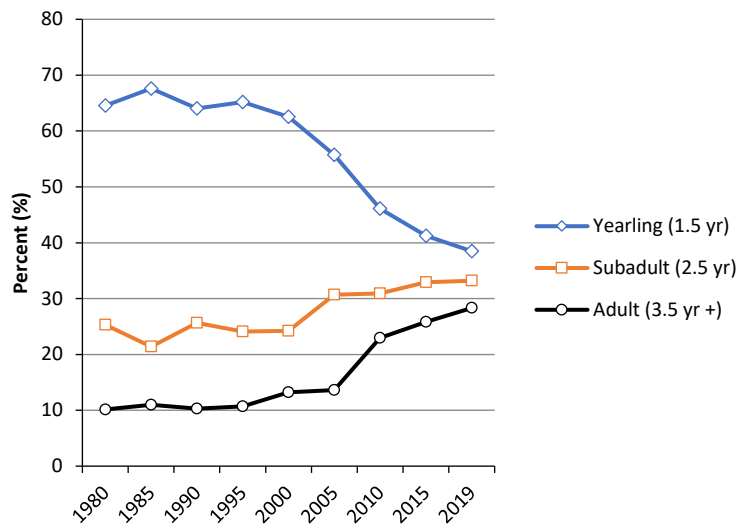
County	Public Land			Resident Harvest			Nonresident Harvest				
	Acres*	% of Total Land in County	% of County Harvest	Public Land	County Total	% of Harvest Taken on Public Land	Public Land	County Total	% of Harvest Taken on Public Land	% of County's Total Harvest Taken by NR	% of County's Public Land Harvest Taken by NR
Lawrence	82,000	28	24.2	257	1,308	19.6	119	244	48.8	15.7	31.6
Scioto	72,000	18	11.6	160	1,704	9.4	75	326	23.0	16.1	31.9
Muskingum	50,000	12	14.4	500	4,232	11.8	209	697	30.0	14.1	29.5
Vinton	49,000	19	13.3	237	2,068	11.5	88	371	23.7	15.2	27.1
Hocking	45,000	17	15.2	326	2,709	12.0	156	454	34.4	14.4	32.4
Washington	40,000	10	7.5	180	2,860	6.3	67	432	15.5	13.1	27.1
Morgan	38,000	14	15.1	330	2,400	13.8	113	520	21.7	17.8	25.5
Coshocton	37,000	10	9.0	427	5,939	7.2	174	776	22.4	11.6	29.0
Athens	33,000	10	9.8	249	2,704	9.2	80	656	12.2	19.5	24.3
Monroe	31,000	10	7.8	154	2,200	7.0	38	272	14.0	11.0	19.8

\*Lands open to public hunting that are owned or administered by the ODNR or U.S. Forest Service (Wayne National Forest), rounded to the nearest 1,000 acres.

## Deer Age Structure

In 2019, Division of Wildlife personnel aged 5,099 deer during the weeklong gun season (8% of the reported harvest) from 51 processors in 44 counties as well as from three inspection stations in the Disease Surveillance Area of Holmes and Tuscarawas counties. Figure 6 shows how the age structure of the antlered harvest has changed over time. The proportion of yearlings in the antlered buck harvest has been steadily declining since the late 1990s. In the early to mid-1980s, nearly 70% of the bucks harvested were yearlings. Today, that percentage is below 40%. A reduction of this magnitude would normally be a result of some type of regulation change, such as antler point restrictions. In Ohio's case, the decline in yearling buck harvest is likely due to at least two factors. Most importantly, Ohio hunters seem to be aware of the benefits of allowing bucks to mature and have acted on their own self-imposed restrictions. Second, the growth of the deer herd over time, coupled with liberal antlerless harvest opportunities, likely reduced the pressure on the antlered segment of the population.

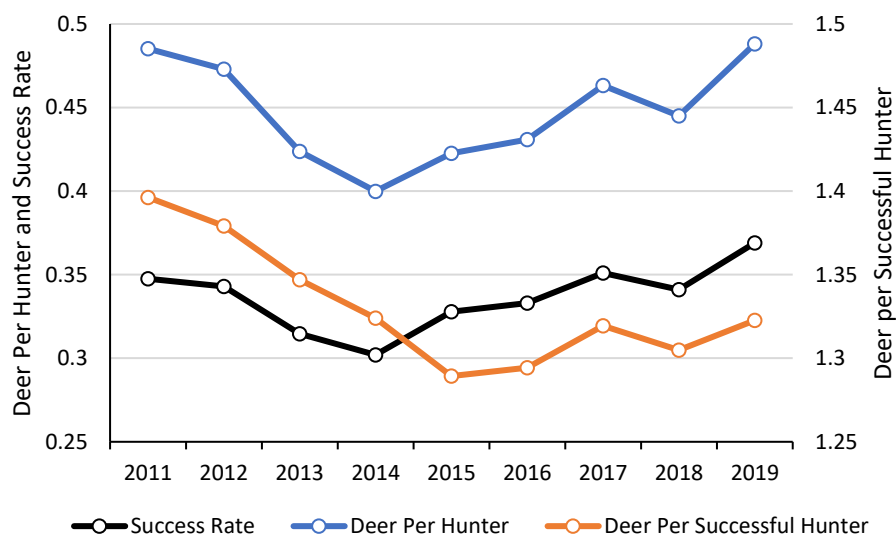
Figure 6. Statewide trends in antlered buck age structure based on a sample of the gun season harvest, 1980 – 2019.



## HUNTER SUCCESS, PARTICIPATION, AND EFFORT

In the 2019-20 season, 192,473 resident adults purchased at least one either-sex or deer management permit and 71,024 harvested at least one deer, resulting in a 37% hunter success rate (Table 7, Figure 7). Hunter success rates differed markedly on public and private land. Just over one-third of private land hunters were successful, as compared to only 14% of public land hunters. Because our deer hunter surveys are limited to resident adult hunters, rates may be different for nonresident hunters, as well as youth, disabled veterans, free and reduced cost seniors, and landowners.

Figure 7. Success rate and average number of deer per hunter and per successful hunter, 2011-2019.



During the 2019-20 season, 75% of hunters bowhunted, while 76%, 44% and 33% reported hunting in the gun, bonus gun, and muzzleloader seasons, respectively (Table 7; Figure 8). Hunter effort has remained relatively constant since 2001, though the average number of days hunted seems to have dipped slightly in recent years. During the 2019-20 season, archery, gun, and muzzleloader hunters spent, on average, 15.7, 3.7, and 2.2 days hunting those seasons, with hunters averaging 16.0 days in the field over the course of the entire season (Table 8). Roughly one in five gun hunters reported a deer harvest and archery hunters posted a success rate just over 26% (Table 7). When considering success rates, it is important to remember that success in any particular season is very much dependent upon success in other seasons. Approximately 70% of gun hunters are also bow hunters that likely hunt prior to the gun season. Because most hunters participate in multiple seasons and many choose to hunt bucks only, season-specific success rates have limited value and certainly cannot be compared with other states where hunters have season-specific permits. Additionally, these estimates are derived from surveys of adult, resident hunters that purchased a deer permit. Therefore, season participation and success rates of nonresidents, youth, disabled veterans, seniors, and landowners are currently unknown.

Figure 8. Season-specific hunter participation rates based on results of the 2019-20 deer hunter survey.

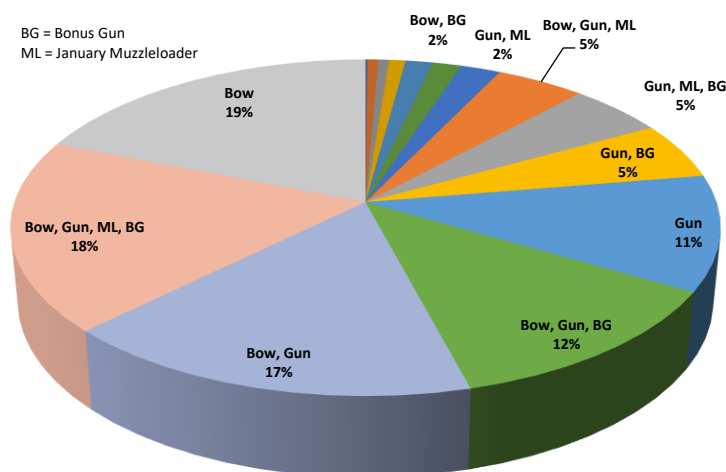


Table 7. Participation and success rates for resident adult hunters on public and private land for the 2019-20 deer season compared to the three-year average<sup>1</sup>.

	Participation Rate (%)		Estimated Number of Hunters		Number of Successful Hunters		Success Rate (%)	
	2019	3yr avg.	2019	3yr avg.	2019	3yr avg.	2019	3yr avg.
<b>Total</b>			<b>192,473<sup>2</sup></b>	<b>206,184</b>	<b>71,024<sup>3</sup></b>	<b>70,420</b>	<b>36.9<sup>4</sup></b>	<b>34.2</b>
Private			181,376 <sup>5</sup>	194,627	65,403	63,642	36.1	32.7
Public			53,485 <sup>6</sup>	55,906	7,382	8,582	13.8	15.3
<b>Archery</b>	75 <sup>7</sup>	76	144,447 <sup>8</sup>	156,166	37,804	34,948	26.2	22.5
<b>Gun</b>	76	80	146,287	165,476	29,882	31,178	20.4	18.9
<b>Bonus Gun</b>	44	43	85,564	87,890	7,271	5,845	8.5	6.7
<b>Muzzleloader</b>	33	40	64,035	81,517	5,481	7,476	8.6	9.2

<sup>1</sup>Average of 2016-17, 2017-18, and 2018-19 deer seasons.

<sup>2</sup>The number of adult resident hunters who purchased at least one deer permit during the 2019-20 season. Excludes non-residents, youth, seniors, disabled veterans, and landowners.

<sup>3</sup>The number of adult resident hunters that reported harvesting at least one deer during the 2019-20 season.

<sup>4</sup>The number of successful adult resident hunters divided by the total number of adult resident hunters that purchased a deer permit.

<sup>5</sup>Among respondents to the 2019-20 deer hunter survey, 94.2% indicated that they hunted at least once on private land during the season. This rate is applied to the known number of licensed adult hunters to estimate the total number of hunters hunting private land at least once during the 2019-20 season.

<sup>6</sup>Among respondents to the 2019-20 deer hunter survey, 27.8% indicated that they hunted at least once on public land during the season. This rate is applied to the known number of licensed adult hunters to estimate the total number of hunters hunting public land at least once during the 2019-20 season.

<sup>7</sup>Among respondents to the 2019-20 deer hunter survey, 75% indicated that they hunted at least one day during the 2018-19 archery season.

<sup>8</sup>Estimated total number of licensed resident adults that hunted during the 2019-20 archery season. Estimate is based on an 75% participation rate among the 192,473 resident adults who purchased at least one deer permit during the 2019-20 deer season.

Table 8. Average number of days spent hunting in 2001, 2011-13, and 2015-19 deer seasons.

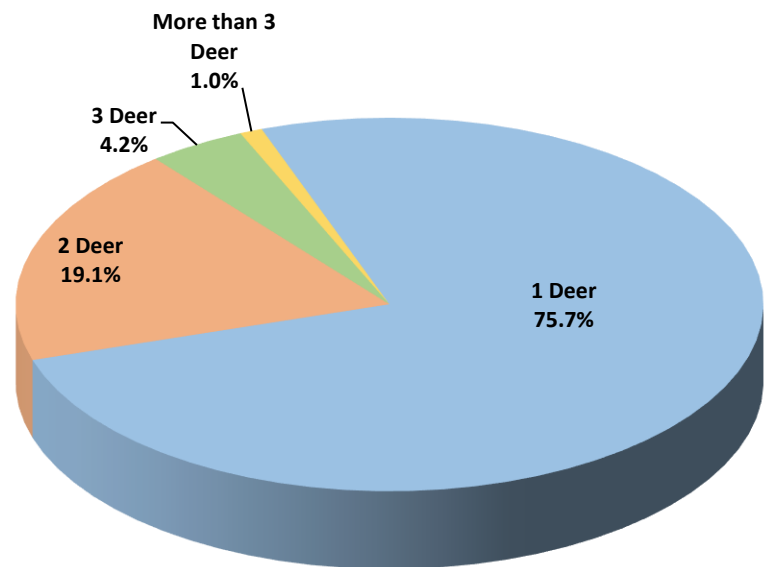
	2001	2011	2012	2013	2015	2016	2017	2018	2019
<b>Archery</b>	20.8	19.3	19.2	19.7	20.3	17.0	16.3	15.4	15.7
<b>Gun</b>	3.8	4.0	3.9	3.7	3.7	3.5	3.5	3.4	3.7
<b>Bonus Gun</b>	-	1.6	1.5	-	1.6	1.5	1.5	1.5	1.5
<b>Muzzleloader</b>	2.8	2.4	2.2	2.0	2.1	2.1	2.1	2.1	2.2
<b>All Seasons</b>	17.3	19.9	20.0	19.7	20.3	18.0	16.6	15.1	16.0

From 2011 to 2014, there was a steady decline in the number of deer taken per hunter. In 2011, 243,126 resident adults harvested 117,988 deer, or 0.49 deer per hunter. This figure declined to 0.47 in 2012, 0.42 in 2013, and in 2014 there were 0.40 deer harvested per resident adult. However, this trend began to reverse in 2015 increasing to 0.49 deer harvested per hunter in 2019. Similarly, there was a steady decline in the number of deer taken by successful hunters from a high of 1.40 in 2011 to a low of 1.29 in 2015. Slight increases have occurred since, with successful hunters taking 1.32 deer in 2019 (Figure 7).

A little more than a decade ago, in spite of large deer populations and liberal bag limits, only 18% of successful hunters harvested more than one deer during the 2006 season. This changed dramatically with the introduction of the \$15 antlerless permit in 2007. From 2007 to 2011, there was a steady increase in the percentage of successful hunters harvesting more than one deer, peaking at 27% in 2011. Then, as deer populations were reduced and restrictions were placed on the use of the antlerless deer permit, the proportion of hunters taking more than one deer steadily declined, reaching 22% in 2016. Not surprisingly, given that all significant measures of the deer population indicate herd growth has occurred recently, the proportion of hunters harvesting more than a single deer increased to 24% in 2019. Of important note is the fact that statewide bag limits have little impact on both the number of deer harvested per hunter and the percentage of hunters harvesting multiple deer. For example, in 2012 the statewide bag limit was 18 deer. That year, successful hunters averaged 1.40 deer and only 27% reported harvesting more than one. The following year, the statewide bag limit was reduced by 50% to nine deer, yet the proportion of hunters bagging multiple deer and the average number of deer harvested dropped by just 3%.

As in years past, the vast majority of successful hunters (76%) harvested only a single deer in the 2019-20 season. Just over 19% of successful hunters bagged two deer, 4% harvested three, and 1.0% took four or more deer (Figure 9). Again, to emphasize the limited influence of a large bag limit, of successful hunters, 1% or less harvest more than three deer in a single season, and specifically in 2019, only 103 of the 192,473 permit buyers (0.05%, or about one out of every 2,000 hunters) filled their 6-deer bag limit.

Figure 9. Percent of successful hunters taking one, two, three, or more than three deer during the 2019-20 season.



# DISEASE UPDATE

## Chronic Wasting Disease

Chronic Wasting Disease (CWD) is a fatal disease of the central nervous system of mule deer, white-tailed deer, elk, moose, and reindeer. CWD is caused by abnormal proteins, or prions (not a bacteria or virus), that ultimately destroy brain tissue. This type of disease is known as a transmissible spongiform encephalopathy. This family of diseases includes bovine spongiform encephalopathy (mad cow disease), scrapie in sheep, and Creutzfeldt-Jakob Disease in humans.

Since 2002 the Division of Wildlife has conducted statewide CWD surveillance, testing 23,959 deer. To date, there has yet to be a wild, free-ranging deer test positive for the disease in Ohio. In 2019, a record 3,818 deer were submitted for CWD testing. Division of Wildlife staff collected 899 road-killed deer from all 88 counties and hunters submitted (directly or via taxidermist/processor) 2,831 deer (one of which was an escaped captive deer) for CWD testing. An additional five escaped or confiscated captive cervids, 32 deer displaying abnormal behavior and/or poor physical condition, 14 found dead under suspicious circumstances, 26 removed in conflict situations, and 11 others were tested for CWD in 2019. CWD was not detected in any of these samples.

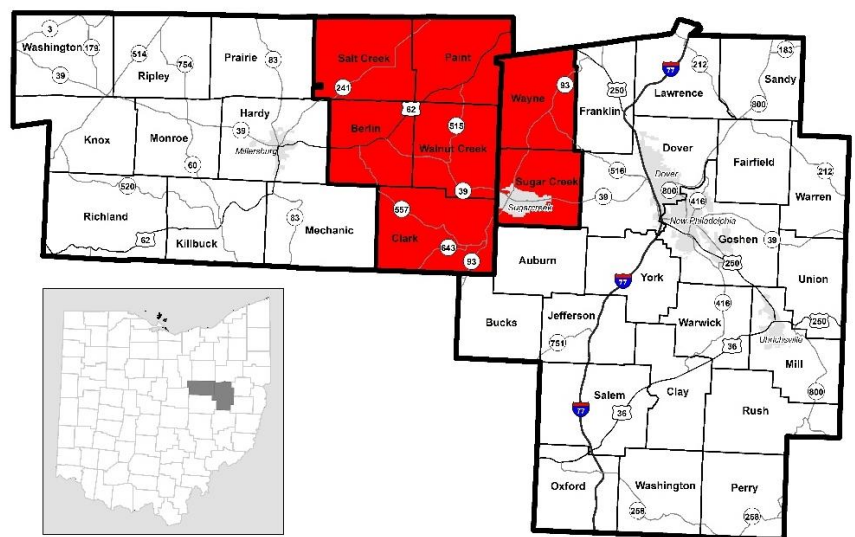
### Disease Surveillance Area

In October 2014, a mature buck from a shooting preserve in Holmes County tested positive for CWD, becoming the first-ever CWD-positive deer in Ohio. The shooting preserve was depopulated in April 2015, and testing revealed no additional CWD-positive animals. Subsequent testing of nearly 300 free-ranging deer in an eight-township area around the shooting preserve failed to detect any CWD-positive deer as well. However, in spring of 2015, two more CWD-positive deer were

reported from a captive white-tailed deer breeding pen in Holmes County. This herd was depopulated in June 2015, and 16 additional deer tested positive for the disease, bringing the total of CWD-positive animals found in Ohio to 19 (all in captive herds). In response to these findings, the Division of Wildlife conducted targeted surveillance in the immediate vicinity of the infected facility during the summer of 2015. Staff collected 18 deer, including two that had escaped from captive facilities, with none testing positive for CWD.

Additionally, the focus area in 2015 was expanded to include two townships in southern Wayne County, and the 10-township focus area was declared a Disease Surveillance Area (DSA, visit [wildohio.gov](http://wildohio.gov) for specific regulations pertaining to a DSA). The 10-township DSA in central Holmes and southern Wayne counties expired on July 31, 2018 after three seasons of intensive surveillance revealed no CWD positive animals in the wild herd. However, due to the early 2018 discovery of three additional CWD-positives in an eastern Holmes County captive facility, a new, 7-township DSA was established (Figure 10). During the 2019-20 season, 248 hunter harvested deer from DSA 2018-01 were collected at inspection stations during Ohio's 7-day gun season. Again, CWD was not detected in any of the deer tested.

Figure 10. Disease Surveillance Area 2018-01 (DSA)



 Disease Surveillance Area 2018\_01

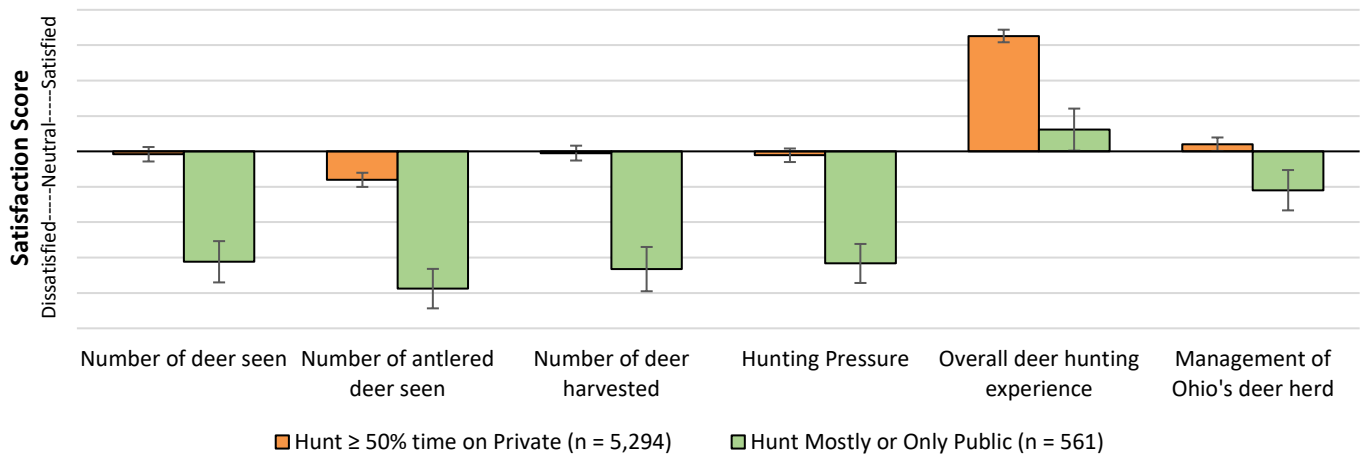
Effective Date: August 1, 2018

## A CLOSER LOOK AT THE 2019-20 SEASON

### Public Land Regulations

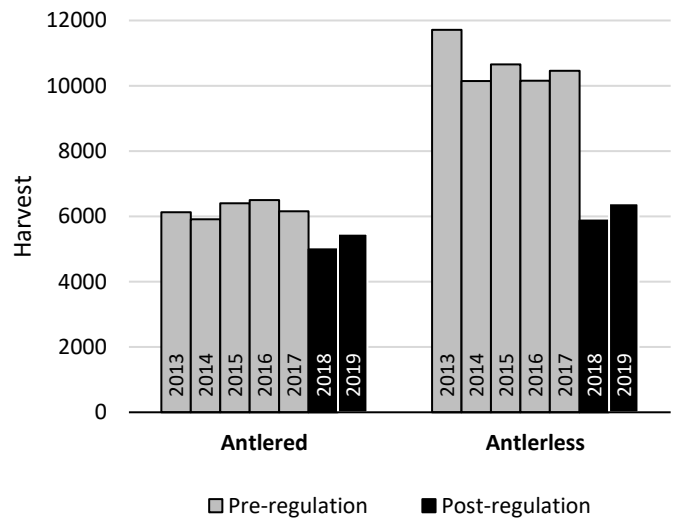
The only significant harvest regulation change made in the last few years was for public hunting areas (defined in Ohio Administrative Code, 1501:31-15-04, as the areas listed at wildohio.gov). The regulations were: 1) a statewide limit of one antlerless deer on public hunting areas, and 2) no antlerless deer after the close of the 7-day gun season (remainder of season was buck-only). This regulation change was due to the feedback received from deer hunter surveys over the past several years. In a 2015-16 survey, nearly two-thirds of those that self-identified as hunting mostly or exclusively public land indicated support for reducing antlerless harvest on public lands to encourage herd growth. Additionally, when compared to the general population of resident deer hunters, those hunting public land have reported much lower satisfaction for various aspects of their hunting experience (Figure 11).

Figure 11. Satisfaction scores of public vs private land hunters based on three years of deer hunter surveys, 2015-2017.



The 2019-20 season marked the second season under the public land harvest restrictions. Due to several factors that annually influence the harvest, it is difficult to isolate the impact of the public land harvest restrictions alone. However, public land harvests in 2018 and 2019 were significantly lower than the typical harvest in the years preceding the regulation change (Figure 12). For reasons not completely understood, though possibly related to the regulation's impact on hunter behavior, the 2018 and 2019 antlered harvest averaged 17% lower (5,233) than the pre-regulation average (6,329). The antlerless harvest in the first two years of the harvest restriction averaged 6,135, which was 41% lower than the pre-restriction average (10,311). An impact of this magnitude serves as evidence that the regulations were an effective means of reducing the antlerless harvest. These public land regulations will remain in effect for the 2020-21 season and the Division of Wildlife will continue monitoring harvest trends, populations, and hunter attitudes to determine if the reduction in antlerless harvest results in herd growth and improvements in hunter satisfaction.

Figure 12. Antlered and antlerless harvests on public land, 2013-2019



## Notable Characteristics of the 2019 Season

### Prevent Plant Acres

Record rainfall across portions of the Midwest in the spring and summer of 2019 prevented many producers from planting crops. Nationally, nearly 20 million acres went unplanted in 2019, doubling the previous record set in 2011. Ohio was second only to South Dakota in the amount of land designated as prevent plant at 1.6 million acres, with a majority of the impact occurring in the northwest portion of the state. In these agricultural landscapes, standing crops normally provide refuge for deer during the hunting season. Without the additional cover and food sources that crops normally provide in this region, deer in western Ohio were likely much more susceptible to hunter harvest in the 2019-20 season. As a result, many counties in this region saw dramatic increases in their deer harvest (Table 9).

Table 9. Top 10 prevent plant counties (by acreage) and associated change in harvest.

County	Avg. Prevent Plant acres ('17-'18)	2019 Prevent Plant acres	2019 Harvest Change (%) <sup>1</sup>
Wood	430	133,000	+16.2
Hardin	640	90,000	+25.8
Hancock	170	88,000	+21.5
Williams	1,300	85,000	+6.8
Defiance	890	84,000	+11.1
Seneca	740	83,000	+16.0
Henry	200	70,000	+16.0
Fulton	280	66,000	+12.6
Paulding	320	63,000	+15.4
Wyandot	220	54,000	+7.9

<sup>1</sup>Difference between 2019 and the average of 2016-2018 total harvest

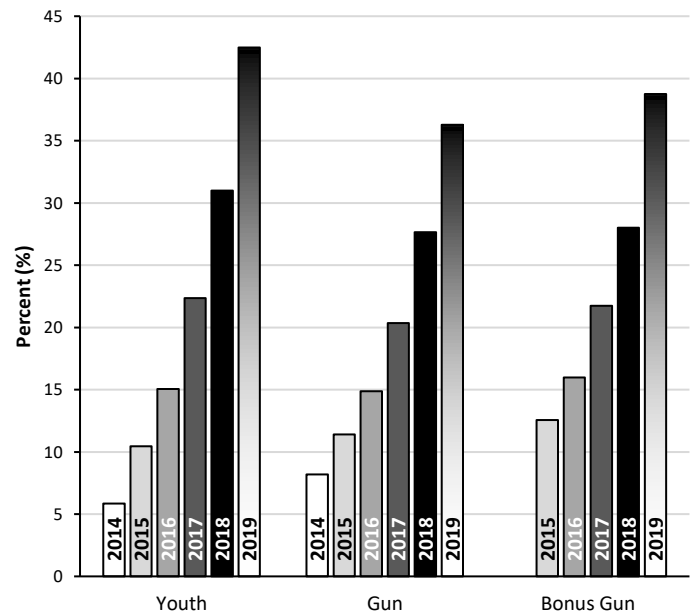
### Relationship between Muzzleloader and Bonus Gun Harvests

The 26% decline in the muzzleloader harvest was in near perfect contrast to the 25% increase in the 2-day, bonus gun season, and, in fact, the combined harvest between these two seasons has been roughly 25,000 over the last few years. Poor bonus gun season harvests typically result in more deer harvested in the muzzleloader season and vice versa. For example, the 2016 bonus gun harvest was just 9,228 and nearly 16,000 deer were harvested a few weeks later during the muzzleloader season. The 2019 season was just the opposite with a stellar bonus gun season resulting in nearly 14,000 deer and a muzzleloader harvest of just over 10,000.

### Straight-walled Cartridge Rifles

The 2019-20 season marked the sixth year that straight-walled cartridge (SWC) calibers were legal for deer hunting. Hunters harvested 2,655, 23,062, and 5,310 deer with SWC rifles during the youth, gun and bonus gun seasons, respectively, accounting for 42%, 36%, and 39% of the total reported harvest during those seasons. The proportion of the harvest taken with SWC rifles has increased each year since the 2014 season when they were first legalized for deer hunting (Figure 13). According to the results of the 2019-20 Deer Hunter Effort and Harvest Survey (a survey of adult resident hunters), 49% still used a shotgun during the traditional seven-day gun season, 12% used a muzzleloader, and 36% used a SWC rifle. The .45-70 was the most popular choice among hunters, with 37% opting for this caliber. Other popular choices included the .450 Bushmaster (31%), .44 Magnum (13%), and the new 350 Legend (7%).

Figure 13. Proportion of youth, gun, and bonus gun season harvest taken with straight-walled cartridge rifles, 2014-2019.

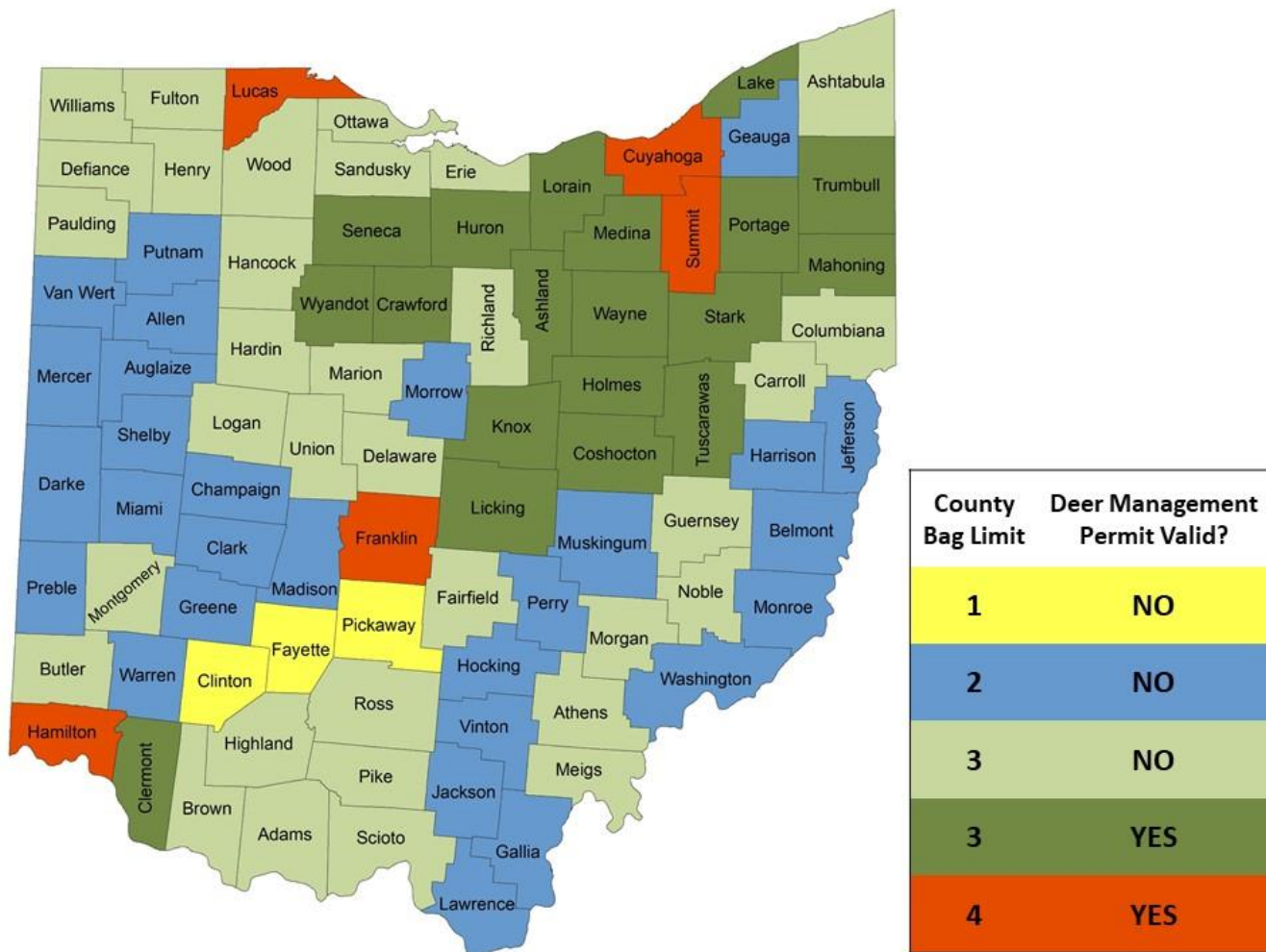


## 2020-21 SEASON PREVIEW

In the mid- to late-2000s, deer populations across most of the state had reached record-highs - well above population goals that had been established in 2000. Through a combination of liberal bag limits, reduced cost antlerless permits, education on the importance of an adequate doe harvest, and other programmatic changes; populations in most areas of the state were reduced to, or very near, goal by 2014. Starting in 2013, regulations became increasingly conservative to alleviate harvest pressure on antlerless deer and stabilize populations. Predictably, the results of the 2015 population goal setting process indicated that most areas of the state could tolerate moderate herd growth (see *Periodic Goal-Setting Survey* on page 20 for more information), and, consistent with these desires, data indicate that deer populations in most areas of the state are increasing.

Season dates, aside from minor calendar adjustments, will remain the same for the 2020-2021 season. After several seasons with stable regulations, some changes to county bag limits and usage of the deer management permit will occur in the 2020-21 season. County regulations will remain the same in the majority of the state (46 counties), but adjustments have been made to encourage the harvest of additional antlerless deer in 27 counties, and to reduce antlerless harvest in 15 counties (Figure 14). These adjustments have been made according to the results of the latest goal-setting survey as well as the observed trends in harvest and population indices.

Figure 14. Deer harvest regulations for 2020-21 season.



# BUCKEYE BIG BUCK CLUB

The Buckeye Big Buck Club (BBBC) was founded by former Division of Wildlife biologist and writer Merrill C. Gilfillan in 1957. The primary purposes of the organization are to increase the appreciation of Ohio's white-tailed deer herd, maintain a permanent record of Ohio's trophy deer, and foster wise management of the resource. Membership is open to any hunter that legally harvests a qualifying deer (minimum 140" typical or 160" non-typical). The Club hosts a banquet each year to showcase deer entering the club and award the hunters that harvested them (most deer entering the Club in any given year were harvested in the season prior). The list of special award winners at the 2020 banquet can be found in Table 10, the top three 2020 entries by implement in Table 11, and the top five typicals and non-typical of all time in Table 12. A searchable database, containing all 19,161 bucks entered in the Club, is available online at <https://apps.ohiodnr.gov/wildlife/bigbuck/>, and a list of official scorers can be found in Appendix 2.

Table 10. 2020 Buckeye Big Buck Club special award winners.

Award	Description	Name	Score	County
<b>Guilliams-McWilliams Trophy</b>	Top typical	Matthew Hoehn	186 <sup>2</sup> / <sub>8</sub>	Auglaize
<b>Hill-Hill Trophy</b>	Top non-typical	William Gibson, Jr.	225 <sup>1</sup> / <sub>8</sub>	Clermont
<b>BBBC Young Hunter Award</b>	Youngest new member	Ireland McGee – Age 9	140 <sup>5</sup> / <sub>8</sub>	Belmont
		Braden St. Clair – Age 8	148 <sup>4</sup> / <sub>8</sub>	Guernsey
		Brody Snider – Age 8	140 <sup>7</sup> / <sub>8</sub>	Perry
<b>George Applegarth Senior Hunter Award</b>	Oldest new member	Roy Noel – Age 83	179 <sup>1</sup> / <sub>8</sub>	Pike
<b>Lori Byers Female Hunter Award</b>	Top scoring typical and non-typical by a female	Typical – Lori Byers	159 <sup>2</sup> / <sub>8</sub>	Ashland
		Non-typical – Lindsey Hawk	197 <sup>1</sup> / <sub>8</sub>	Highland
<b>Division of Wildlife Employee of the Year</b>	Outstanding contributions to deer management	Bob Ford		
<b>President Weisenbarger Award</b>	Outstanding service to the BBBC	Will Ogden		

Table 11. 2020 Buckeye Big Buck Club top three typical and non-typical entries by implement type.

Implement	TYPICAL			NON-TYPICAL		
	Name	Score	County	Name	Score	County
<b>Longbow</b>	Matthew Hoehn	186 <sup>2</sup> / <sub>8</sub>	Auglaize	William Gibson, Jr.	225 <sup>1</sup> / <sub>8</sub>	Clermont
	Dean Herron	177 <sup>3</sup> / <sub>8</sub>	Allen	William Stuckey, Jr.	223 <sup>5</sup> / <sub>8</sub>	Ross
	Roger Jewell, Jr.	171 <sup>4</sup> / <sub>8</sub>	Franklin	Bryan Levan	222 <sup>6</sup> / <sub>8</sub>	Logan
<b>Crossbow</b>	Dick Holsapple	173 <sup>7</sup> / <sub>8</sub>	Darke	Jeffrey Thieman	222 <sup>3</sup> / <sub>8</sub>	Morgan
	Jeremy McBeth	172 <sup>6</sup> / <sub>8</sub>	Auglaize	Mark Garland	210 <sup>3</sup> / <sub>8</sub>	Morrow
	Tyler Warman	172 <sup>3</sup> / <sub>8</sub>	Clermont	Michael Sugg	198 <sup>5</sup> / <sub>8</sub>	Fulton
<b>Shotgun</b>	Dennis Carver	170 <sup>1</sup> / <sub>8</sub>	Morrow	Jeff Stimmel	218 <sup>2</sup> / <sub>8</sub>	Delaware
	Brock Leachman	166 <sup>5</sup> / <sub>8</sub>	Muskingum	Brandon Miller	190 <sup>1</sup> / <sub>8</sub>	Henry
	Tyler Massie	164 <sup>3</sup> / <sub>8</sub>	Gallia	Harry Puckett	186 <sup>4</sup> / <sub>8</sub>	Delaware
<b>Muzzleloader</b>	Tyler Grys	171 <sup>1</sup> / <sub>8</sub>	Huron	Corwin Heatwole	216 <sup>2</sup> / <sub>8</sub>	Vinton
	Weston Baker	162 <sup>7</sup> / <sub>8</sub>	Shelby	Tom Murphy	189 <sup>1</sup> / <sub>8</sub>	Ashland
	Christopher Ruchty	160 <sup>1</sup> / <sub>8</sub>	Preble	Mike Rhodes	178 <sup>7</sup> / <sub>8</sub>	Guernsey
<b>Rifle</b>	Rick Scott	166 <sup>3</sup> / <sub>8</sub>	Guernsey	John Boblenz	204 <sup>7</sup> / <sub>8</sub>	Marion
	Jonathan Blosser	163 <sup>2</sup> / <sub>8</sub>	Defiance	Christian Knellinger	191 <sup>2</sup> / <sub>8</sub>	Noble
	Makenna Medlen	158 <sup>3</sup> / <sub>8</sub>	Jefferson	Nathan Wells	189 <sup>3</sup> / <sub>8</sub>	Clinton
<b>Handgun</b>	Steven Leopold	169 <sup>3</sup> / <sub>8</sub>	Hardin			
	Joshua Owen	164 <sup>5</sup> / <sub>8</sub>	Columbiana			
	Randy Wilhelm	141 <sup>4</sup> / <sub>8</sub>	Knox			

Table 12. Buckeye Big Buck Club's top five typical and non-typical entries of all time.

	Rank	Hunter	Harvest Year	County	Implement	Score
<b>Typical</b>	1	Brad Jerman	2004	Warren	Crossbow	201 <sup>1</sup> / <sub>8</sub>
	1	William Kontras	1986	Clark	Vertical Bow	201 <sup>1</sup> / <sub>8</sub>
	3	Tim Reed	2004	Muskingum	Vertical Bow	198 <sup>3</sup> / <sub>8</sub>
	4	Steve Davis	2016	Clinton	Crossbow	194 <sup>3</sup> / <sub>8</sub>
	5	John Daugherty	2006	Wayne	Shotgun	193 <sup>1</sup> / <sub>8</sub>
<b>Non-typical</b>	1	Michael Beatty	2000	Greene	Vertical Bow	304 <sup>4</sup> / <sub>8</sub>
	2	Jonathan Schmucker	2006	Adams	Crossbow	295 <sup>3</sup> / <sub>8</sub>
	3	Daniel Coffman	2015	Fairfield	Vertical Bow	287 <sup>5</sup> / <sub>8</sub>
	4	Dave Kopp	2016	Stark	Crossbow	267 <sup>3</sup> / <sub>8</sub>
	5	Chester Veach	1971	Pike	Shotgun	261 <sup>5</sup> / <sub>8</sub>

While some biases exist in the data (differences in regional/local awareness of the Club, varying interest in entering a qualifying deer, regional availability of official BBBC scorers and scoring events, etc.), a summary of the record book entries can still provide a general indication of how trophy deer are distributed throughout the state. For instance, it should be no surprise that over the course of the Club's history, the counties where deer have typically been most abundant and buck harvests the largest (east-central and southeast Ohio) are the same counties with the most record book entries (Figure 15). However, accounting for differences in population size shows that a larger percentage of the bucks harvested in western Ohio counties end up in the BBBC (Figure 16). All else being equal, if you were fortunate enough to harvest a buck, the odds that it qualifies for the BBBC are much better if it came from Auglaize County than if it was a deer from Ashtabula County.

Figure 15. Total Buckeye Big Buck Club entries by county.

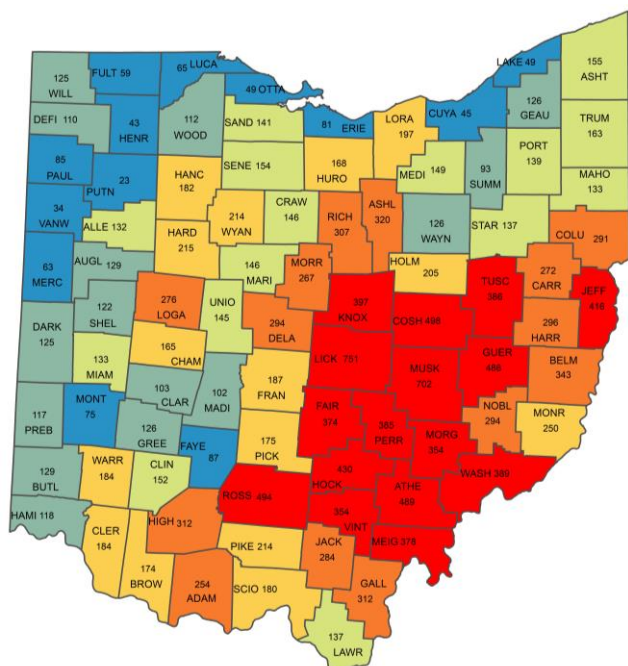
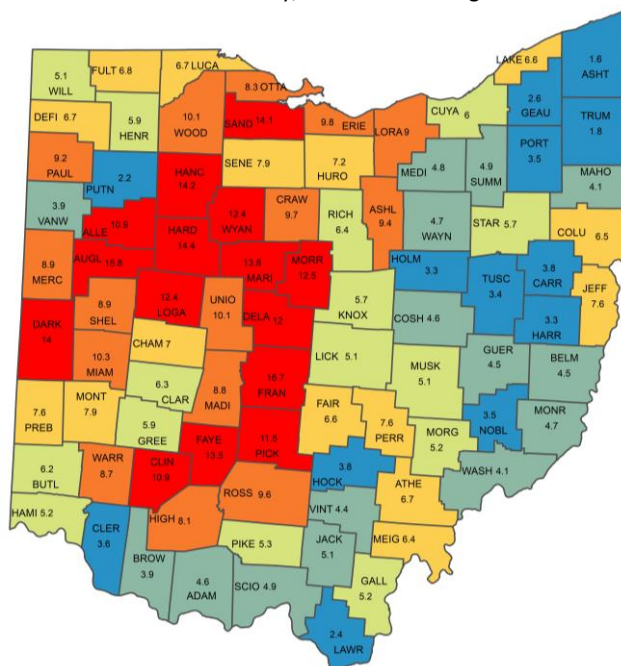


Figure 16. Number of Buckeye Big Buck Club entries for every 1,000 bucks harvested in the county, 2009-2018 average.



# HUNTER FEEDBACK

Hunter surveys comprise a vital piece of the deer management process. Information gleaned from these surveys are critical for monitoring changes in hunter participation, effort, and deer observations as well as gathering opinions on various deer management issues. The Division of Wildlife's deer program utilizes three primary surveys, with each serving a unique purpose.

## ***Annual Deer Hunter Survey***

Each year since 2011, and periodically over the last several decades, the Division of Wildlife has sent surveys to a random sample of adult resident deer permit buyers. The primary purpose of this survey is to monitor hunter participation and effort. In fact, much of the information provided in previous sections of this publication is derived from this annual survey. We also utilize this survey to collect hunter opinions on specific deer management issues that may be used to inform policy making decisions and develop or adjust deer hunting regulations. However, responses to this survey have been lacking in recent years, making detailed analyses of the data very difficult. In 2019, survey invitations were successfully delivered via email to 9,505 randomly selected, resident deer permit buyers. Only 1,444 hunters (15%) answered at least one survey question, and only 1,216 hunters (13%) completed the survey. When presenting this lack of hunter participation in surveys to various hunter groups, we often face a series of commonly asked questions.

### *Why not send the survey to more than 10,000 hunters?*

While we may consider a slight increase in the number of invitations sent each year to account for low response rates, this isn't the magic bullet for one very important reason – survey fatigue. It is well documented that more frequent requests for feedback lead to greater rates of refusal. At the current rate of 10,000 survey invitations per year and a database containing roughly 100,000 email addresses, hunters, on average, would receive a survey every ten years. Additionally, it is important to note that other Division of Wildlife programs utilize surveys, and since most hunters hunt multiple species or are otherwise eligible to receive surveys from other programs within the Division of Wildlife, hunters can very quickly become overwhelmed with survey requests. Of course, the Division of Wildlife is not the only entity utilizing surveys to gather information – businesses frequently request feedback from their customers on a variety of everyday items and services.

### *Why not survey hunters when they purchase their license?*

There are several reasons we do not survey hunters at the point of sale. The primary purposes of the survey are to estimate participation rates, gauge hunter effort (number of days hunted), and solicit feedback on different aspects of a hunter's deer season. A survey administered when purchasing a permit would not allow us to gather that data, as the information we are most interested in gathering would have not yet occurred. Additionally, 60% of all deer permits were sold in-person at license agents in the 2019-20 season, where administering a survey is not very practical.

### *Why not survey hunters when they check their deer?*

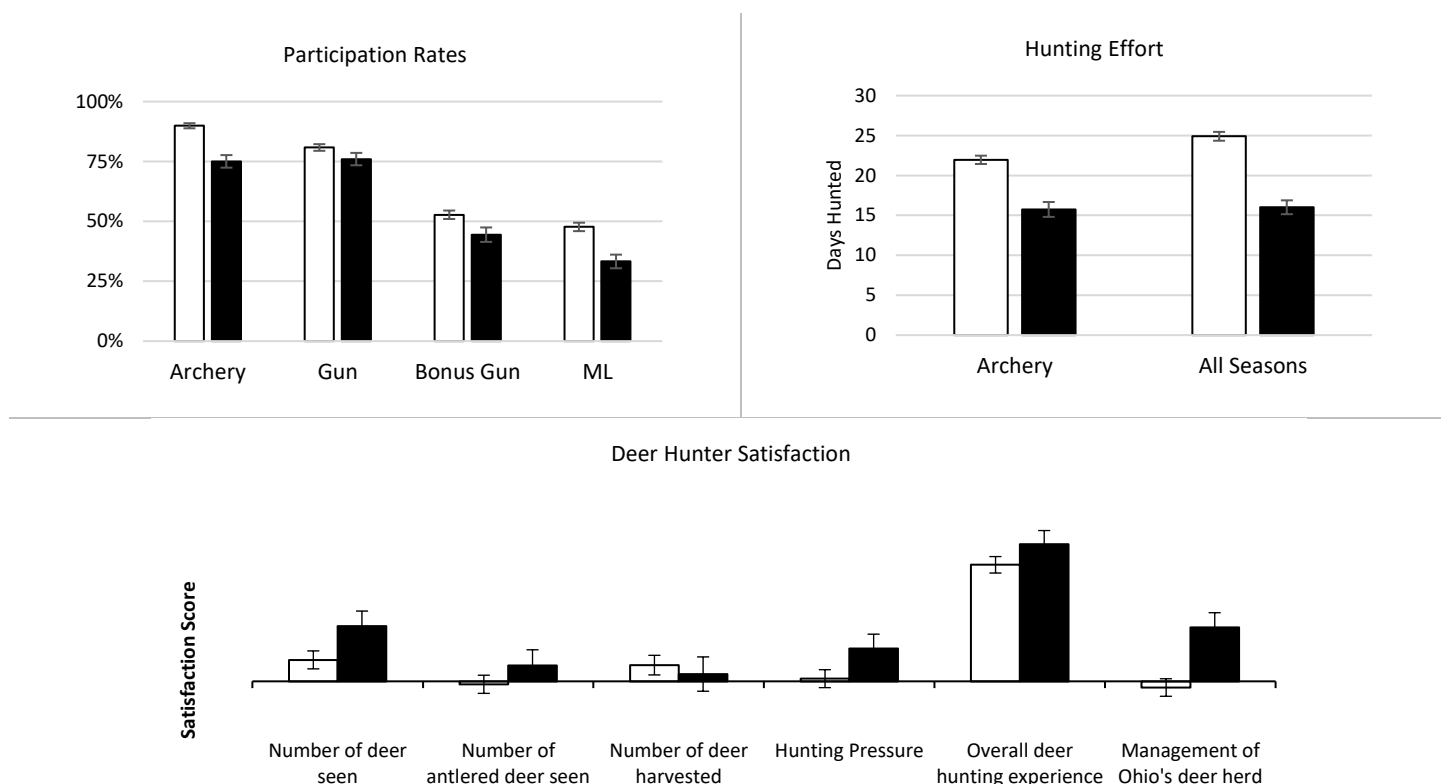
A post-harvest survey would only allow us to describe characteristics of *successful* hunters.

### *Why not post a survey to the website to give everyone a chance to participate?*

Due to low response rates to our annual deer hunter surveys, we made a survey available on our website for several weeks at the end of the 2019-20 season (Jan. 10 – Feb. 11). The purpose was to evaluate the effectiveness of an open survey on our website as a replacement to our annual deer hunter survey. An announcement for the survey was featured in a scrolling header on our website beginning in late October 2019 (about 3 months prior to the survey being launched), and a description of the survey containing the survey link was posted to our 'Wild Ohio Hunter' Facebook page four times (Jan. 13, Jan. 21, Jan. 30, Feb. 7) throughout the survey period. We received 3,729 partial responses

(answered at least one question) and 3,234 completes. Unfortunately, several items from the open web survey differed significantly from the 2019-20 survey of randomly selected deer permit buyers. Most notably, open web survey participants indicated higher levels of participation and effort and lower levels of satisfaction than the randomly selected group (Figure 17). It appears that, in accordance with prior research, our web-based solicitation for survey volunteers resulted in “voluntary response bias” – where the resulting sample over-represents individuals with strong opinions. In our case, an open survey appeared to attract hunters with a tendency to report higher participation rates, more hunting effort, and consistently stronger negative opinions than the randomly selected group. Given the significant disparity between the two survey types, open web surveys do not appear to be a suitable solution to poor response rates on the annual deer hunter survey.

Figure 17. Participation, effort, and opinions of participants in the 2019-20 annual deer hunter survey (black bars) and the open survey found on our website (white bars).



While an open survey on our website doesn't appear to be a solution, we are considering other options to improve the response rate of our annual deer hunter survey. In the past, survey participants were selected at the beginning of the archery season so hunters could be informed to keep track of their hunting activities over the course of the deer season. Unfortunately, to randomly select hunters for the survey at the beginning of the season, participants were chosen from a list of prior-year permit buyers. This method likely resulted in the selection of some participants that did not hunt the current season. Additionally, the survey format could have resulted in survey fatigue and incomplete surveys, as participants were asked to return to the survey multiple times over the course of the season to update their hunting activities. Starting in the 2020-21 season, survey participants will be selected from a list of current-year deer permit buyers at the close of the gun season (data indicate 97% of the year's deer hunters will have purchased at least one permit by the end of gun season). Participants will then be notified of their selection and asked to make note of their season's hunting activities so that they can accurately report them on a survey that will not be sent until the end of the deer season.

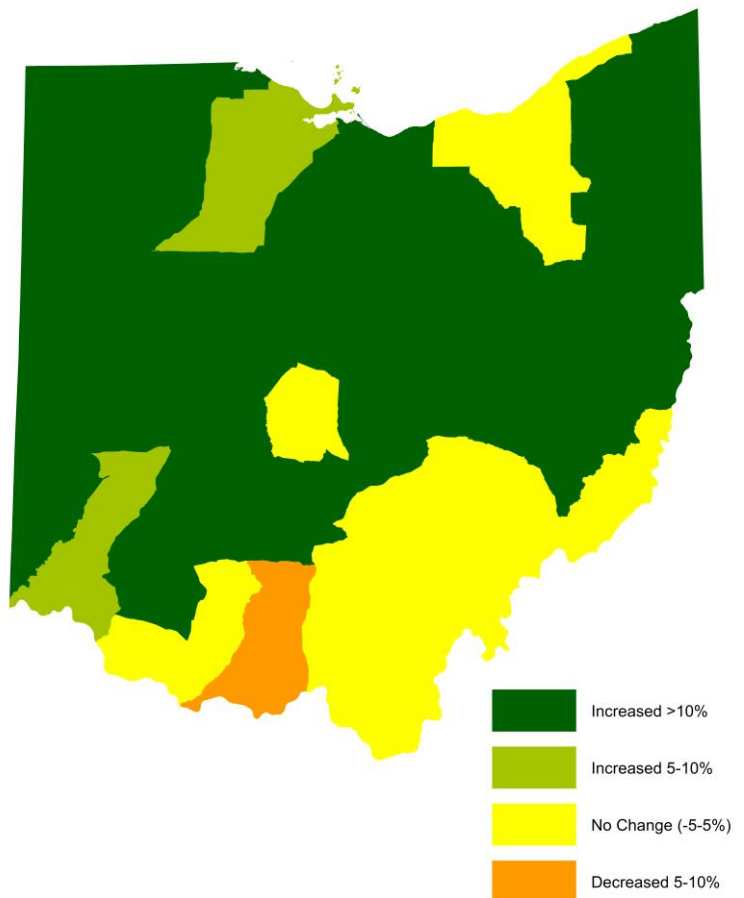
## Annual Bowhunter Survey

The primary purpose of the annual bowhunter survey is to monitor trends in sighting rates of several furbearing species (coyote, bobcat, fox, raccoon, etc.), but it also serves as one of the deer program's most important population monitoring tools. By recording the number of hours spent hunting and the number of animals seen, hunters participating in this survey provide the data necessary to generate a sighting rate (deer observed per hour) that can be used to track populations over time. The bowhunter survey is not influenced by many of the biases that often impact harvest data (most notably hunter selectivity), making the sighting data an extremely important index to population size. Unlike other surveys, the bowhunter survey is open to anyone willing to participate. We offer two versions of the survey, paper and electronic. In 2019, 1,019 hunters completed the paper version and 2,342 hunters participated in the online survey. In all, these hunters reported spending 105,000 hours on stand and 93,700 deer sightings for a sighting rate of 0.89 deer/hour. While there is a substantial number of participants, it is not quite enough to make management decisions at a county level – there just too few cooperating hunters in each county. If you would like to take an active role in the management of Ohio's deer herd, we encourage anyone interested in participating in the annual bowhunter survey to contact us by phone at 1-800-WILDLIFE (1-800-945-3543) or via email at [wildinfo@dnr.state.oh.us](mailto:wildinfo@dnr.state.oh.us).

## Periodic Goal-Setting Survey

The third, and arguably most important survey we utilize is a periodic (every 3-5 years) survey of deer hunters and landowners to set population goals (increase, decrease, or stabilize). We conducted goal-setting surveys in 2015 and most recently in the summer of 2019. Participants in each group (farmers and hunters) were asked to answer the same question: *In the area that you hunt/farm, are there too many, too few, or just about the right number of deer?* Results of the 2015 survey suggested room for moderate herd growth across much of the state with 50% of hunters reporting *too few deer* and just 29% of farmers responding *too many deer*. After several seasons of conservative regulations and primary population indices indicating that population growth had occurred in many of these areas, we conducted another goal-setting survey in 2019 to determine the impact of recent herd increases on stakeholder opinions. Nearly 3,000 hunters responded, and, as expected, the proportion reporting *too few deer* declined to 41% and the percent reporting *just about the right number* of deer increased from 40% in 2015 to 50% in 2019. Figure 18 provides a regional view of the changes in hunter opinions from 2015 to 2019, where a large portion of the state (dark green) saw more than a 10% increase in the proportion of hunters reporting about the right number of deer.

Figure 18. Difference in the proportion of hunters reporting about the right number of deer in 2019 compared to 2015. Significant improvements were made in a large portion of the state, while some work remains in the southeastern portion of the state where increases were called for in 2015 but opinions were largely unchanged in 2019.

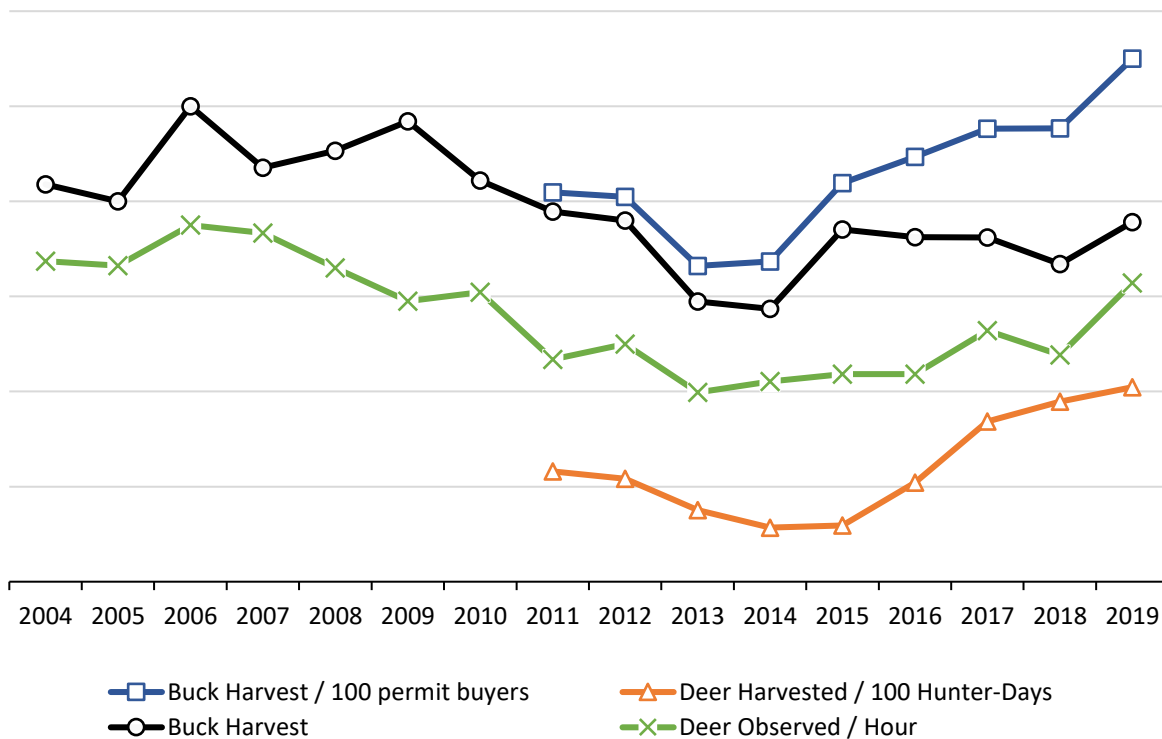


## UNDERSTANDING POPULATION TRENDS

While the Division of Wildlife does not routinely count deer, several trends that reflect changes in the size of the deer population are monitored annually. Some of the trends used include: the number of bucks harvested, carcasses removed from roadways, deer seen per hour, and number of days to harvest a deer. Rather than direct population estimates, each of these measures serve as an index to the size of the population. In other words, they change when the deer population changes. Contrary to popular belief, biologists do not need to know exactly how many deer are on the landscape to properly manage the population. Rather, determining 1) whether the population is stable, increasing, or decreasing, and 2) whether its current trajectory is in agreement with population objectives are key to making harvest management decisions. These indices provide this valuable information.

Though the annual buck harvest has been used as the primary index of deer population size, a host of variables can influence the number of bucks harvested each year. Crop harvest timing, mast availability, and weather on traditionally high harvest days (opening day of gun season) can certainly impact harvest. Using the annual buck harvest as an index to population size also assumes that hunter participation, effort, and selectivity is relatively constant from year to year. Unfortunately, as hunter numbers continue to decline, we have had to develop a buck harvest index that accounts for the annual decline in hunting pressure. Additionally, we rely heavily on annual hunter surveys. In the annual Deer Hunter Effort and Harvest Survey hunters provide information regarding their effort (number of days hunted), harvest, and opinions of the deer population in the area they hunt. Finally, participants in the annual Bowhunter Survey record time spent hunting and number of deer seen on each hunting trip. Collectively these data allow biologists to determine if the population is stable, growing, or declining and, most importantly, determine if trends are consistent with direction provided by the results of population goal setting surveys (see *Periodic Goal-Setting Survey* on page 20). Figure 19 illustrates general consistency in direction for the different indices that are used to monitor population trends.

Figure 19. Statewide deer population trends based on reported buck harvest, buck harvest per permit buyer, deer observed per hour of bowhunting (annual bowhunter survey), and deer harvested per 100 days of hunting effort (annual deer hunter survey), 2004-2019.





# APPENDIX 1

## COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2019	3-year average	Diff. (%)	2019	3-year average	2019	3-year average	2019	3-year average	Diff. (%)
Adams	Gun	344	415	-17.1	508	550	85	102	937	1,066	-12.1
	Crossbow	477	462	3.2	353	376	57	53	887	890	-0.4
	Longbow	297	349	-14.9	210	235	25	33	532	617	-13.8
	Bonus Gun	62	51	22.4	99	95	8	12	169	158	7.2
	Muzzleloader	57	93	-38.7	99	152	12	21	168	267	-37.0
	Youth	50	85	-41.2	28	36	3	9	81	130	-37.5
	Total	1,295	1,464	-11.5	1,307	1,454	191	231	2,793	3,149	-11.3
Allen	Gun	153	122	25.1	171	152	37	44	361	318	13.6
	Crossbow	212	146	45.5	142	136	23	40	377	322	17.2
	Longbow	86	81	6.2	70	74	12	17	168	172	-2.5
	Bonus Gun	37	20	85.0	65	28	7	10	109	59	85.8
	Muzzleloader	13	21	-39.1	30	27	6	6	49	54	-9.8
	Youth	25	15	70.5	11	12	4	4	40	31	29.0
	Total	534	409	30.5	493	433	91	123	1,118	965	15.8
Ashland	Gun	415	421	-1.3	708	634	152	179	1,275	1,234	3.3
	Crossbow	491	369	33.1	420	331	80	74	991	774	28.1
	Longbow	204	196	4.1	196	226	21	26	421	448	-6.1
	Bonus Gun	85	62	37.1	169	132	39	30	293	224	30.6
	Muzzleloader	52	63	-17.9	119	145	25	33	196	241	-18.7
	Youth	76	56	36.5	74	41	18	9	168	105	59.5
	Total	1,335	1,174	13.7	1,704	1,523	339	357	3,378	3,054	10.6
Ashtabula	Gun	604	609	-0.8	1,012	1,088	285	323	1,901	2,021	-5.9
	Crossbow	672	577	16.4	659	669	188	178	1,519	1,424	6.7
	Longbow	261	223	16.9	269	297	77	73	607	593	2.4
	Bonus Gun	143	107	34.1	316	243	70	75	529	424	24.8
	Muzzleloader	52	83	-37.1	135	216	38	65	225	363	-38.1
	Youth	41	56	-27.2	58	49	20	20	119	125	-4.8
	Total	1,785	1,668	7.0	2,479	2,587	685	745	4,949	5,000	-1.0
Athens	Gun	511	558	-8.4	662	749	92	122	1,265	1,429	-11.5
	Crossbow	555	486	14.2	296	277	46	38	897	801	12.0
	Longbow	342	385	-11.2	237	250	17	31	596	666	-10.6
	Bonus Gun	66	67	-1.0	118	114	16	14	200	195	2.7
	Muzzleloader	86	122	-29.3	158	230	24	32	268	384	-30.3
	Youth	66	70	-5.7	30	31	16	10	112	111	0.6
	Total	1,636	1,696	-3.5	1,508	1,661	216	250	3,360	3,607	-6.8

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## COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2019	3-year average	Diff. (%)	2019	3-year average	2019	3-year average	2019	3-year average	Diff. (%)
Auglaize	Gun	145	110	31.8	144	133	52	46	341	289	17.9
	Crossbow	165	105	56.6	126	99	37	28	328	233	40.8
	Longbow	71	60	18.3	47	65	8	13	126	139	-9.1
	Bonus Gun	27	18	50.0	39	27	6	6	72	52	39.4
	Muzzleloader	13	18	-27.8	26	30	6	7	45	55	-18.7
	Youth	17	14	21.4	14	12	6	5	37	31	19.4
	Total	443	329	34.8	400	372	117	107	960	808	18.9
Belmont	Gun	485	511	-5.1	620	603	92	109	1,197	1,223	-2.2
	Crossbow	498	405	23.1	200	245	19	32	717	682	5.1
	Longbow	220	194	13.6	142	124	9	14	371	332	11.7
	Bonus Gun	74	72	2.8	169	118	26	18	269	207	29.7
	Muzzleloader	77	92	-16.3	148	190	19	36	244	317	-23.1
	Youth	67	90	-25.6	39	41	6	11	112	142	-20.9
	Total	1,434	1,372	4.5	1,331	1,334	171	221	2,936	2,927	0.3
Brown	Gun	278	313	-11.3	444	468	76	82	798	863	-7.5
	Crossbow	315	314	0.3	287	269	36	39	638	622	2.6
	Longbow	233	244	-4.6	204	216	13	29	450	490	-8.2
	Bonus Gun	56	46	22.6	108	76	17	15	181	137	32.1
	Muzzleloader	38	65	-41.5	110	124	23	20	171	209	-18.1
	Youth	34	42	-19.7	25	24	6	5	65	72	-9.3
	Total	958	1,036	-7.5	1,187	1,185	171	192	2,316	2,413	-4.0
Butler	Gun	133	127	4.7	134	136	27	33	294	296	-0.6
	Crossbow	309	251	23.1	265	213	48	46	622	510	21.9
	Longbow	167	162	3.1	125	134	23	27	315	322	-2.3
	Bonus Gun	38	15	153.3	50	28	9	5	97	48	102.1
	Muzzleloader	30	31	-3.2	39	50	13	8	82	89	-7.5
	Youth	12	16	-25.0	13	6	3	3	28	25	12.0
	Total	697	606	15.1	633	573	124	122	1,454	1,301	11.8
Carroll	Gun	496	572	-13.3	809	801	170	185	1,475	1,558	-5.3
	Crossbow	589	440	33.8	434	348	65	68	1,088	856	27.2
	Longbow	257	226	13.9	191	187	32	25	480	438	9.7
	Bonus Gun	85	80	6.7	249	160	40	34	374	273	37.0
	Muzzleloader	68	100	-32.2	176	236	20	43	264	379	-30.4
	Youth	61	67	-9.4	50	37	8	20	119	124	-4.0
	Total	1,570	1,497	4.9	1,932	1,789	341	376	3,843	3,662	4.9

# APPENDIX 1

## COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2019	3-year average	Diff. (%)	2019	3-year average	2019	3-year average	2019	3-year average	Diff. (%)
Champaign	Gun	145	162	-10.7	205	173	26	38	376	374	0.5
	Crossbow	213	168	27.0	169	144	33	32	415	343	21.0
	Longbow	125	127	-1.6	105	101	15	21	245	249	-1.6
	Bonus Gun	35	17	101.9	68	32	6	5	109	55	99.4
	Muzzleloader	20	27	-26.8	46	40	7	7	73	75	-2.2
	Youth	20	23	-13.0	17	10	5	5	42	37	12.5
	Total	563	528	6.6	611	504	92	110	1,266	1,142	10.8
Clark	Gun	73	84	-13.1	94	80	15	22	182	186	-2.2
	Crossbow	185	128	44.2	112	98	21	16	318	243	31.0
	Longbow	69	76	-9.6	77	75	11	10	157	161	-2.5
	Bonus Gun	14	15	-8.7	27	16	0	4	41	35	18.3
	Muzzleloader	12	19	-37.9	17	26	6	5	35	50	-29.5
	Youth	16	10	54.8	0	4	3	3	19	17	11.8
	Total	372	336	10.6	331	301	58	59	761	697	9.2
Clermont	Gun	214	239	-10.5	282	317	62	55	558	611	-8.7
	Crossbow	446	390	14.3	438	376	84	71	968	838	15.6
	Longbow	241	257	-6.3	251	299	26	35	518	591	-12.4
	Bonus Gun	42	32	29.9	88	67	20	12	150	111	35.5
	Muzzleloader	46	52	-11.0	80	86	9	14	135	152	-11.0
	Youth	36	30	20.0	24	17	5	5	65	52	25.0
	Total	1,033	1,006	2.6	1,172	1,169	207	194	2,412	2,370	1.8
Clinton	Gun	114	101	12.9	116	117	27	31	257	249	3.2
	Crossbow	118	103	14.9	91	76	15	20	224	198	12.9
	Longbow	69	74	-6.3	73	66	3	12	145	151	-4.0
	Bonus Gun	22	17	26.9	32	24	8	3	62	45	37.8
	Muzzleloader	12	19	-36.8	28	35	4	9	44	63	-30.5
	Youth	16	17	-5.9	7	8	5	4	28	29	-4.5
	Total	355	334	6.3	352	330	65	79	772	744	3.8
Columbiana	Gun	411	460	-10.7	607	637	156	161	1,174	1,258	-6.7
	Crossbow	537	403	33.3	368	323	74	72	979	798	22.6
	Longbow	204	189	7.9	143	152	33	30	380	371	2.3
	Bonus Gun	89	77	16.1	185	129	42	34	316	240	31.5
	Muzzleloader	51	76	-32.9	119	163	18	36	188	275	-31.7
	Youth	48	50	-4.0	46	34	21	14	115	97	18.2
	Total	1,349	1,266	6.6	1,484	1,461	347	351	3,180	3,078	3.3

# APPENDIX 1

## COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2019	3-year average	Diff. (%)	2019	3-year average	2019	3-year average	2019	3-year average	Diff. (%)
Coshocton	Gun	748	799	-6.4	1,326	1,280	251	274	2,325	2,353	-1.2
	Crossbow	1,093	845	29.3	941	706	126	122	2,160	1,674	29.1
	Longbow	548	511	7.2	456	420	60	65	1,064	997	6.7
	Bonus Gun	118	82	43.3	270	196	44	47	432	325	32.8
	Muzzleloader	116	148	-21.4	245	318	31	56	392	521	-24.8
	Youth	117	128	-8.4	116	87	30	29	263	244	7.8
	Total	2,761	2,536	8.9	3,404	3,041	550	599	6,715	6,176	8.7
Crawford	Gun	238	226	5.5	267	258	57	75	562	559	0.6
	Crossbow	156	138	12.8	150	114	23	23	329	275	19.8
	Longbow	79	64	23.4	55	57	9	8	143	128	11.4
	Bonus Gun	21	24	-13.7	66	44	12	12	99	81	22.7
	Muzzleloader	16	17	-5.9	35	41	9	7	60	65	-8.2
	Youth	23	17	35.3	20	14	6	5	49	36	36.1
	Total	541	489	10.6	597	532	118	131	1,256	1,152	9.0
Cuyahoga	Gun	12	17	-30.8	30	24	7	4	49	46	6.5
	Crossbow	195	208	-6.1	342	413	50	68	587	688	-14.7
	Longbow	73	74	-1.4	169	184	15	30	257	288	-10.8
	Bonus Gun	1	1	0.0	0	2	1	1	2	4	-50.0
	Muzzleloader	0	1	-100	2	0	2	1	4	2	140.0
	Youth	1	0	200.0	0	0	1	0	2	0	500.0
	Total	284	301	-5.6	543	624	76	104	903	1,029	-12.2
Darke	Gun	95	107	-11.2	115	121	38	32	248	260	-4.5
	Crossbow	110	88	25.5	125	80	19	21	254	189	34.6
	Longbow	64	66	-3.5	59	58	10	15	133	140	-5.0
	Bonus Gun	28	14	104.9	44	18	8	7	80	39	106.9
	Muzzleloader	16	13	23.1	26	23	3	3	45	40	13.4
	Youth	23	10	130.0	15	12	3	2	41	24	68.5
	Total	340	301	13.0	385	316	84	82	809	699	15.7
Defiance	Gun	314	262	20.0	344	333	110	105	768	699	9.8
	Crossbow	257	176	45.7	198	162	30	42	485	381	27.4
	Longbow	82	87	-5.4	81	99	7	17	170	203	-16.1
	Bonus Gun	53	49	7.4	84	84	22	22	159	155	2.8
	Muzzleloader	23	29	-21.6	41	63	11	15	75	107	-30.1
	Youth	43	25	69.7	34	22	8	10	85	58	46.6
	Total	782	635	23.1	792	771	189	214	1,763	1,621	8.8

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## COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2019	3-year average	Diff. (%)	2019	3-year average	2019	3-year average	2019	3-year average	Diff. (%)
Delaware	Gun	145	171	-15.2	211	198	32	51	388	421	-7.8
	Crossbow	301	236	27.7	241	230	54	49	596	515	15.8
	Longbow	167	168	-0.8	163	192	25	32	355	392	-9.5
	Bonus Gun	24	24	0.0	50	31	7	12	81	67	20.9
	Muzzleloader	21	20	5.0	26	42	11	9	58	71	-17.9
	Youth	17	13	27.5	8	8	4	3	29	24	19.2
	Total	682	637	7.1	703	706	134	160	1,519	1,502	1.1
Erie	Gun	86	92	-6.5	99	115	23	26	208	233	-10.7
	Crossbow	184	165	11.7	128	137	31	30	343	332	3.3
	Longbow	48	55	-12.2	41	54	15	9	104	117	-11.1
	Bonus Gun	20	15	36.4	43	30	7	7	70	51	36.4
	Muzzleloader	10	13	-21.1	20	20	6	6	36	38	-6.1
	Youth	8	31	-74.5	9	33	4	11	21	75	-72.1
	Total	454	406	11.7	483	471	121	124	1,058	1,001	5.7
Fairfield	Gun	218	287	-24.0	313	325	69	79	600	691	-13.1
	Crossbow	306	265	15.5	219	185	43	41	568	491	15.8
	Longbow	184	179	2.6	166	148	10	24	360	351	2.6
	Bonus Gun	38	35	9.6	106	54	14	13	158	102	55.4
	Muzzleloader	33	42	-21.4	59	88	16	16	108	146	-26.0
	Youth	26	30	-14.3	16	20	1	7	43	58	-25.9
	Total	810	843	-4.0	893	829	154	182	1,857	1,854	0.2
Fayette	Gun	64	54	19.3	69	49	6	11	139	113	23.0
	Crossbow	49	54	-9.3	35	25	7	7	91	85	6.6
	Longbow	34	35	-1.9	11	18	3	5	48	58	-16.8
	Bonus Gun	6	9	-33.3	16	8	2	2	24	19	26.3
	Muzzleloader	8	12	-35.1	9	11	1	2	18	26	-29.9
	Youth	11	9	17.9	5	2	0	2	16	14	17.1
	Total	175	175	0.0	146	114	19	29	340	318	7.0
Franklin	Gun	49	62	-20.5	54	71	12	18	115	151	-23.7
	Crossbow	175	156	12.4	143	151	18	31	336	338	-0.5
	Longbow	99	101	-1.7	87	110	11	17	197	227	-13.3
	Bonus Gun	14	5	200.0	21	15	2	3	37	23	63.2
	Muzzleloader	18	9	107.7	16	20	5	4	39	33	19.4
	Youth	4	5	-25.0	2	3	1	1	7	9	-25.0
	Total	360	339	6.2	326	372	49	75	735	786	-6.5

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## COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2019	3-year average	Diff. (%)	2019	3-year average	2019	3-year average	2019	3-year average	Diff. (%)
Fulton	Gun	143	143	0.2	131	142	35	40	309	325	-4.8
	Crossbow	134	100	34.0	90	78	25	19	249	197	26.4
	Longbow	61	54	13.7	46	49	12	12	119	115	3.2
	Bonus Gun	18	23	-20.6	28	27	5	6	51	56	-9.5
	Muzzleloader	12	14	-14.3	25	18	2	7	39	39	0.0
	Youth	15	9	73.1	7	6	2	4	24	19	26.3
	Total	384	345	11.4	329	325	82	90	795	759	4.7
Gallia	Gun	344	500	-31.2	550	619	89	105	983	1,224	-19.7
	Crossbow	322	323	-0.3	219	197	41	28	582	548	6.1
	Longbow	175	194	-9.9	102	119	8	15	285	328	-13.0
	Bonus Gun	48	44	9.9	78	82	10	16	136	142	-4.0
	Muzzleloader	41	74	-44.3	60	147	15	18	116	239	-51.5
	Youth	29	62	-53.5	31	34	6	9	66	105	-37.3
	Total	970	1,205	-19.5	1,051	1,205	170	192	2,191	2,602	-15.8
Geauga	Gun	189	205	-8.0	266	250	73	78	528	533	-0.9
	Crossbow	331	289	14.4	312	310	80	100	723	699	3.4
	Longbow	155	128	20.8	186	164	47	51	388	344	12.8
	Bonus Gun	36	38	-6.1	76	56	18	15	130	109	18.9
	Muzzleloader	36	24	50.0	47	60	11	17	94	102	-7.5
	Youth	18	16	12.5	25	16	7	5	50	37	33.9
	Total	767	711	7.9	916	867	239	268	1,922	1,846	4.1
Greene	Gun	97	87	11.9	119	103	16	19	232	208	11.4
	Crossbow	152	143	6.3	111	120	18	18	281	281	-0.1
	Longbow	98	96	2.4	85	80	10	14	193	189	1.9
	Bonus Gun	17	17	-1.9	42	22	7	2	66	41	59.7
	Muzzleloader	16	18	-12.7	20	26	4	7	40	52	-22.6
	Youth	13	13	2.6	7	7	3	1	23	21	9.5
	Total	395	375	5.2	388	361	59	63	842	799	5.3
Guernsey	Gun	605	713	-15.2	959	949	170	210	1,734	1,872	-7.4
	Crossbow	781	623	25.3	538	436	70	89	1,389	1,148	21.0
	Longbow	340	299	13.6	232	244	29	38	601	582	3.3
	Bonus Gun	81	82	-1.6	191	148	38	35	310	265	16.8
	Muzzleloader	91	117	-22.0	173	295	28	51	292	463	-36.9
	Youth	75	93	-19.1	67	57	17	18	159	168	-5.5
	Total	1,985	1,943	2.2	2,181	2,146	358	446	4,524	4,535	-0.2

# APPENDIX 1

## COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2019	3-year average	Diff. (%)	2019	3-year average	2019	3-year average	2019	3-year average	Diff. (%)
Hamilton	Gun	55	67	-17.5	68	80	13	17	136	164	-16.9
	Crossbow	330	312	5.9	421	395	91	75	842	782	7.7
	Longbow	195	200	-2.3	251	296	47	55	493	550	-10.4
	Bonus Gun	10	10	3.4	24	22	0	3	34	35	-2.9
	Muzzleloader	11	11	-2.9	22	22	2	5	35	38	-7.9
	Youth	4	5	-25.0	4	6	0	2	8	13	-40.0
	Total	605	607	-0.3	791	824	154	157	1,550	1,588	-2.4
Hancock	Gun	204	212	-3.6	227	190	58	59	489	461	6.2
	Crossbow	232	166	39.8	161	112	26	28	419	306	36.9
	Longbow	130	124	4.8	92	97	12	15	234	236	-1.0
	Bonus Gun	48	30	58.2	61	36	18	8	127	74	72.4
	Muzzleloader	21	17	21.2	34	35	7	8	62	60	2.8
	Youth	29	19	50.0	19	12	3	4	51	35	44.3
	Total	667	575	16.1	596	484	124	124	1,387	1,183	17.2
Hardin	Gun	194	173	12.4	301	227	59	61	554	461	20.3
	Crossbow	164	121	35.9	177	122	46	30	387	273	41.9
	Longbow	100	99	1.4	104	103	18	26	222	228	-2.6
	Bonus Gun	53	34	57.4	73	45	19	12	145	91	58.8
	Muzzleloader	19	30	-36.0	50	66	12	13	81	109	-25.7
	Youth	28	22	25.4	22	10	9	7	59	39	50.0
	Total	564	482	17.1	730	579	165	150	1,459	1,211	20.5
Harrison	Gun	490	528	-7.3	766	769	154	164	1,410	1,461	-3.5
	Crossbow	576	470	22.6	370	339	67	48	1,013	856	18.3
	Longbow	271	239	13.5	195	197	22	19	488	454	7.5
	Bonus Gun	75	61	23.0	168	141	25	32	268	234	14.5
	Muzzleloader	70	105	-33.3	160	242	28	44	258	390	-33.9
	Youth	69	66	4.0	49	37	13	14	131	118	11.3
	Total	1,558	1,482	5.2	1,724	1,741	312	322	3,594	3,545	1.4
Henry	Gun	175	140	24.7	168	143	37	41	380	324	17.2
	Crossbow	117	82	42.7	55	59	13	18	185	159	16.4
	Longbow	52	49	6.8	43	38	9	10	104	96	8.0
	Bonus Gun	27	29	-5.8	23	25	6	7	56	61	-7.7
	Muzzleloader	8	11	-29.4	12	21	4	3	24	35	-31.4
	Youth	10	9	7.1	14	10	2	3	26	22	18.2
	Total	392	323	21.4	318	300	73	83	783	705	11.0

# APPENDIX 1

## COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2019	3-year average	Diff. (%)	2019	3-year average	2019	3-year average	2019	3-year average	Diff. (%)
Highland	Gun	281	338	-16.9	472	497	90	105	843	940	-10.3
	Crossbow	407	303	34.5	304	278	65	69	776	650	19.3
	Longbow	211	206	2.4	223	201	22	35	456	443	3.0
	Bonus Gun	53	46	15.2	124	88	22	17	199	151	31.8
	Muzzleloader	55	69	-20.7	85	120	13	23	153	213	-28.1
	Youth	55	55	0.6	44	32	15	9	114	95	20.0
	Total	1,072	1,024	4.7	1,264	1,226	229	261	2,565	2,510	2.2
Hocking	Gun	414	512	-19.2	682	613	101	131	1,197	1,256	-4.7
	Crossbow	557	458	21.7	359	291	48	44	964	792	21.7
	Longbow	301	288	4.6	185	186	24	22	510	495	3.0
	Bonus Gun	53	56	-5.4	98	85	15	18	166	159	4.4
	Muzzleloader	62	108	-42.8	143	190	19	32	224	330	-32.1
	Youth	46	51	-10.4	29	21	11	5	86	78	10.7
	Total	1,443	1,481	-2.6	1,499	1,398	221	251	3,163	3,130	1.1
Holmes	Gun	468	493	-5.1	858	775	142	185	1,468	1,453	1.0
	Crossbow	704	527	33.7	656	487	115	90	1,475	1,104	33.6
	Longbow	280	264	5.9	378	323	38	41	696	628	10.8
	Bonus Gun	89	58	53.4	236	136	44	30	369	224	65.0
	Muzzleloader	57	67	-15.3	159	189	20	43	236	299	-21.2
	Youth	91	88	3.4	99	61	21	20	211	169	24.9
	Total	1,710	1,511	13.2	2,407	1,990	390	418	4,507	3,918	15.0
Huron	Gun	362	358	1.1	487	523	132	146	981	1,028	-4.5
	Crossbow	310	244	27.0	246	206	44	50	600	500	20.1
	Longbow	128	140	-8.6	112	130	25	18	265	288	-8.0
	Bonus Gun	67	51	31.4	123	110	36	30	226	192	17.9
	Muzzleloader	23	37	-38.4	56	81	19	24	98	143	-31.5
	Youth	34	38	-11.3	36	27	20	13	90	78	15.9
	Total	936	875	7.0	1,075	1,092	280	285	2,291	2,252	1.7
Jackson	Gun	332	430	-22.8	574	564	82	118	988	1,112	-11.2
	Crossbow	488	414	17.8	334	296	58	41	880	751	17.1
	Longbow	264	279	-5.4	170	186	18	20	452	484	-6.7
	Bonus Gun	58	52	10.8	103	102	16	16	177	170	3.9
	Muzzleloader	61	78	-21.8	133	153	18	28	212	260	-18.4
	Youth	54	60	-9.5	29	33	11	11	94	104	-9.6
	Total	1,266	1,317	-3.9	1,350	1,344	205	236	2,821	2,897	-2.6

# APPENDIX 1

## COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2019	3-year average	Diff. (%)	2019	3-year average	2019	3-year average	2019	3-year average	Diff. (%)
Jefferson	Gun	353	377	-6.4	375	435	60	77	788	889	-11.4
	Crossbow	423	277	52.5	163	160	21	20	607	457	32.7
	Longbow	183	188	-2.5	92	105	9	10	284	303	-6.2
	Bonus Gun	54	47	14.9	96	81	19	19	169	148	14.4
	Muzzleloader	53	66	-19.7	63	148	17	21	133	235	-43.4
	Youth	44	51	-14.3	28	23	4	7	76	81	-6.2
	Total	1,122	1,013	10.8	823	959	132	155	2,077	2,127	-2.4
Knox	Gun	594	624	-4.9	957	930	223	249	1,774	1,804	-1.7
	Crossbow	670	532	26.0	582	508	90	99	1,342	1,138	17.9
	Longbow	330	339	-2.7	365	334	32	56	727	729	-0.3
	Bonus Gun	95	70	36.4	238	143	44	38	377	251	50.0
	Muzzleloader	64	89	-28.4	164	219	39	47	267	355	-24.8
	Youth	93	81	14.3	85	50	24	20	202	151	33.8
	Total	1,863	1,752	6.3	2,426	2,200	457	517	4,746	4,470	6.2
Lake	Gun	48	53	-8.9	82	94	19	23	149	170	-12.5
	Crossbow	194	183	5.8	234	242	49	58	477	483	-1.3
	Longbow	58	48	21.7	65	86	17	14	140	148	-5.2
	Bonus Gun	15	9	60.7	33	18	4	4	52	31	66.0
	Muzzleloader	7	9	-22.2	11	23	3	2	21	34	-38.2
	Youth	3	4	-18.2	2	3	1	1	6	8	-28.0
	Total	327	307	6.4	428	470	94	104	849	881	-3.6
Lawrence	Gun	263	379	-30.5	372	402	51	56	686	836	-17.9
	Crossbow	264	253	4.5	108	131	16	17	388	401	-3.2
	Longbow	169	190	-11.1	67	98	10	11	246	300	-17.9
	Bonus Gun	31	39	-20.5	56	46	12	6	99	91	8.8
	Muzzleloader	30	45	-32.8	47	83	5	7	82	135	-39.1
	Youth	22	46	-52.2	22	23	1	4	45	73	-38.4
	Total	781	955	-18.2	676	786	95	102	1,552	1,843	-15.8
Licking	Gun	531	580	-8.4	835	838	151	188	1,517	1,606	-5.5
	Crossbow	937	748	25.2	672	650	91	131	1,700	1,530	11.1
	Longbow	417	417	0.0	347	417	34	51	798	885	-9.8
	Bonus Gun	94	74	27.6	216	140	40	34	350	247	41.7
	Muzzleloader	96	116	-17.0	187	250	37	41	320	407	-21.3
	Youth	70	76	-7.5	60	45	20	16	150	137	9.5
	Total	2,166	2,026	6.9	2,335	2,362	377	464	4,878	4,851	0.5

# APPENDIX 1

## COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2019	3-year average	Diff. (%)	2019	3-year average	2019	3-year average	2019	3-year average	Diff. (%)
Logan	Gun	247	248	-0.4	378	328	74	91	699	668	4.7
	Crossbow	303	238	27.3	278	272	63	71	644	580	11.0
	Longbow	173	173	-0.2	216	181	29	30	418	384	8.8
	Bonus Gun	63	39	60.2	108	69	12	15	183	123	48.4
	Muzzleloader	35	34	1.9	77	84	17	16	129	134	-4.0
	Youth	30	40	-25.6	31	21	11	9	72	71	1.9
	Total	858	778	10.2	1,095	962	210	232	2,163	1,972	9.7
Lorain	Gun	207	235	-11.8	283	332	76	102	566	669	-15.4
	Crossbow	425	380	11.8	377	387	78	99	880	866	1.6
	Longbow	137	130	5.4	170	188	31	36	338	354	-4.4
	Bonus Gun	54	54	0.6	96	99	16	23	166	176	-5.7
	Muzzleloader	32	35	-8.6	59	82	15	22	106	139	-23.6
	Youth	25	28	-11.8	31	18	7	7	63	53	18.9
	Total	882	868	1.7	1,024	1,121	228	291	2,134	2,280	-6.4
Lucas	Gun	35	43	-18.0	53	57	27	22	115	122	-5.5
	Crossbow	171	143	19.3	207	188	60	54	438	385	13.7
	Longbow	65	63	2.6	93	97	17	17	175	178	-1.5
	Bonus Gun	13	8	56.0	12	12	2	1	27	21	28.6
	Muzzleloader	2	7	-70.0	4	15	3	1	9	23	-60.9
	Youth	1	3	-62.5	4	3	1	2	6	8	-21.7
	Total	290	269	7.7	377	373	111	99	778	741	4.9
Madison	Gun	71	78	-9.4	81	71	14	13	166	163	2.0
	Crossbow	93	77	20.3	56	49	10	10	159	136	17.2
	Longbow	74	57	29.8	38	45	3	4	115	106	8.8
	Bonus Gun	21	10	117.2	35	17	6	3	62	30	109.0
	Muzzleloader	10	12	-14.3	19	16	5	3	34	30	13.3
	Youth	9	12	-25.0	6	6	1	4	16	22	-26.2
	Total	279	250	11.7	236	205	40	36	555	491	13.0
Mahoning	Gun	184	232	-20.8	242	295	69	91	495	618	-19.9
	Crossbow	427	339	26.0	338	294	82	90	847	723	17.1
	Longbow	134	123	9.2	106	128	21	26	261	277	-5.8
	Bonus Gun	50	42	19.0	61	80	23	21	134	143	-6.3
	Muzzleloader	31	34	-8.8	50	80	18	20	99	133	-25.8
	Youth	15	24	-37.5	13	12	6	6	34	43	-20.3
	Total	847	799	6.0	818	898	219	256	1,884	1,954	-3.6

# APPENDIX 1

## COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2019	3-year average	Diff. (%)	2019	3-year average	2019	3-year average	2019	3-year average	Diff. (%)
Marion	Gun	173	164	5.7	168	179	43	46	384	389	-1.2
	Crossbow	121	89	36.5	98	82	21	17	240	187	28.1
	Longbow	56	65	-14.3	54	57	11	9	121	131	-7.9
	Bonus Gun	28	20	40.0	62	32	7	5	97	56	72.2
	Muzzleloader	18	22	-19.4	25	30	2	4	45	56	-19.2
	Youth	20	16	25.0	9	9	4	2	33	27	22.2
	Total	420	381	10.2	417	392	89	82	926	855	8.3
Medina	Gun	214	234	-8.7	270	281	85	94	569	610	-6.7
	Crossbow	400	372	7.4	384	326	94	85	878	784	12.0
	Longbow	168	148	13.3	148	153	20	30	336	332	1.2
	Bonus Gun	40	51	-21.6	86	80	20	19	146	150	-2.9
	Muzzleloader	47	34	39.6	70	79	15	15	132	128	3.1
	Youth	31	19	66.1	12	13	7	6	50	37	33.9
	Total	915	868	5.5	983	945	243	254	2,141	2,067	3.6
Meigs	Gun	412	518	-20.5	585	674	80	116	1,077	1,308	-17.7
	Crossbow	495	471	5.0	293	282	20	30	808	784	3.1
	Longbow	215	255	-15.7	165	170	9	17	389	442	-12.1
	Bonus Gun	51	63	-19.5	137	104	21	15	209	182	14.6
	Muzzleloader	79	108	-26.9	177	218	24	30	280	356	-21.3
	Youth	72	83	-12.9	39	40	16	8	127	131	-3.3
	Total	1,333	1,505	-11.4	1,405	1,498	172	218	2,910	3,221	-9.7
Mercer	Gun	127	104	21.7	126	123	49	39	302	267	13.3
	Crossbow	112	79	41.8	101	81	35	25	248	184	34.5
	Longbow	44	47	-5.7	51	51	13	14	108	111	-3.0
	Bonus Gun	21	16	28.6	31	21	14	8	66	46	43.5
	Muzzleloader	13	13	-2.5	16	17	6	3	35	34	2.9
	Youth	16	10	54.8	19	9	10	4	45	23	92.9
	Total	337	271	24.2	349	305	128	94	814	670	21.4
Miami	Gun	92	85	8.2	99	97	26	24	217	206	5.2
	Crossbow	192	131	46.9	146	129	35	24	373	283	31.6
	Longbow	71	75	-5.3	59	73	26	15	156	163	-4.5
	Bonus Gun	24	13	84.6	33	18	6	8	63	39	60.2
	Muzzleloader	6	13	-52.6	27	24	1	5	34	41	-17.7
	Youth	14	15	-4.5	10	6	1	3	25	24	2.7
	Total	400	335	19.5	381	351	98	80	879	765	14.9

# APPENDIX 1

## COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2019	3-year average	Diff. (%)	2019	3-year average	2019	3-year average	2019	3-year average	Diff. (%)
Monroe	Gun	419	483	-13.3	548	587	94	117	1,061	1,187	-10.6
	Crossbow	457	344	32.7	203	179	26	27	686	550	24.7
	Longbow	145	124	16.9	78	74	10	10	233	208	12.0
	Bonus Gun	60	49	22.4	118	97	18	15	196	161	22.0
	Muzzleloader	65	77	-15.6	114	174	17	20	196	271	-27.7
	Youth	44	53	-16.5	31	33	6	12	81	98	-17.1
	Total	1,198	1,136	5.4	1,101	1,150	173	203	2,472	2,489	-0.7
Montgomery	Gun	61	63	-3.2	59	49	17	15	137	127	7.6
	Crossbow	175	128	36.7	160	121	44	34	379	283	33.8
	Longbow	54	66	-18.6	87	97	16	26	157	190	-17.2
	Bonus Gun	17	9	82.1	24	12	5	2	46	24	94.4
	Muzzleloader	13	9	50.0	12	19	1	2	26	30	-12.4
	Youth	4	5	-25.0	10	1	1	1	15	7	104.5
	Total	330	282	17.2	356	302	84	81	770	665	15.8
Morgan	Gun	431	461	-6.6	692	680	122	135	1,245	1,277	-2.5
	Crossbow	444	384	15.7	301	234	32	46	777	664	17.0
	Longbow	255	266	-4.3	149	147	12	19	416	432	-3.8
	Bonus Gun	40	51	-22.1	88	92	14	15	142	159	-10.5
	Muzzleloader	77	113	-32.1	123	220	12	31	212	364	-41.8
	Youth	59	68	-13.2	24	37	7	10	90	115	-21.7
	Total	1,318	1,366	-3.5	1,395	1,435	207	263	2,920	3,064	-4.7
Morrow	Gun	221	248	-11.0	272	273	65	88	558	609	-8.4
	Crossbow	282	209	34.9	209	157	35	39	526	404	30.1
	Longbow	120	115	4.7	82	96	17	22	219	233	-6.0
	Bonus Gun	39	30	30.0	79	52	15	12	133	94	42.0
	Muzzleloader	27	30	-9.0	53	64	14	14	94	108	-12.7
	Youth	35	22	61.5	10	13	5	7	50	41	21.0
	Total	731	659	11.0	712	661	153	183	1,596	1,502	6.3
Muskingum	Gun	647	743	-12.9	1,104	1,131	224	242	1,975	2,115	-6.6
	Crossbow	772	655	17.9	475	433	82	74	1,329	1,161	14.5
	Longbow	432	427	1.1	306	281	37	30	775	738	5.0
	Bonus Gun	75	82	-8.2	204	163	24	30	303	275	10.2
	Muzzleloader	79	148	-46.7	222	307	32	58	333	513	-35.0
	Youth	74	91	-18.7	82	60	10	15	166	166	0.2
	Total	2,095	2,162	-3.1	2,421	2,400	413	451	4,929	5,013	-1.7

# APPENDIX 1

## COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2019	3-year average	Diff. (%)	2019	3-year average	2019	3-year average	2019	3-year average	Diff. (%)
Noble	Gun	417	503	-17.1	644	673	107	130	1,168	1,306	-10.6
	Crossbow	504	429	17.5	310	257	45	47	859	733	17.2
	Longbow	197	189	4.0	153	114	21	21	371	324	14.4
	Bonus Gun	47	39	20.5	117	97	17	24	181	161	12.7
	Muzzleloader	50	81	-38.0	137	167	26	32	213	279	-23.7
	Youth	56	72	-21.9	31	25	8	8	95	104	-8.7
	Total	1,284	1,322	-2.9	1,403	1,343	227	265	2,914	2,931	-0.6
Ottawa	Gun	44	45	-2.2	62	55	16	12	122	112	8.6
	Crossbow	119	93	28.4	94	89	38	23	251	205	22.2
	Longbow	25	30	-16.7	24	30	8	7	57	67	-14.9
	Bonus Gun	14	11	27.3	24	15	9	4	47	30	58.4
	Muzzleloader	6	7	-10.0	10	18	5	4	21	29	-27.6
	Youth	5	7	-25.0	9	10	1	3	15	19	-22.4
	Total	216	194	11.5	224	220	77	55	517	469	10.3
Paulding	Gun	184	150	22.9	232	193	65	57	481	400	20.4
	Crossbow	157	114	38.1	106	94	22	24	285	232	23.0
	Longbow	63	72	-12.9	61	53	9	13	133	138	-3.6
	Bonus Gun	38	32	17.5	44	51	10	14	92	97	-5.5
	Muzzleloader	12	21	-43.8	38	40	6	5	56	67	-16.0
	Youth	28	18	52.7	22	14	8	7	58	39	47.5
	Total	486	410	18.6	506	449	122	122	1,114	980	13.6
Perry	Gun	341	444	-23.1	559	586	119	129	1,019	1,158	-12.0
	Crossbow	430	359	19.7	246	205	53	49	729	614	18.8
	Longbow	210	202	3.8	129	136	18	19	357	358	-0.2
	Bonus Gun	47	56	-16.1	110	94	17	18	174	168	3.6
	Muzzleloader	51	78	-34.3	120	151	25	28	196	257	-23.6
	Youth	38	58	-34.9	35	24	8	9	81	91	-11.3
	Total	1,122	1,204	-6.8	1,205	1,207	243	253	2,570	2,664	-3.5
Pickaway	Gun	139	124	12.1	139	134	30	27	308	285	8.1
	Crossbow	119	96	23.5	86	76	14	18	219	190	15.1
	Longbow	74	74	-0.4	51	48	9	8	134	130	2.8
	Bonus Gun	13	18	-29.1	33	26	8	6	54	50	7.3
	Muzzleloader	17	21	-19.0	22	37	8	5	47	63	-25.4
	Youth	23	17	35.3	9	8	0	4	32	28	12.9
	Total	388	355	9.2	342	333	70	69	800	758	5.6

# APPENDIX 1

## COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2019	3-year average	Diff. (%)	2019	3-year average	2019	3-year average	2019	3-year average	Diff. (%)
Pike	Gun	245	290	-15.6	321	367	66	77	632	734	-13.9
	Crossbow	372	315	18.2	256	188	27	36	655	538	21.7
	Longbow	209	195	7.4	105	114	10	17	324	325	-0.4
	Bonus Gun	27	36	-24.3	66	61	7	8	100	104	-4.2
	Muzzleloader	35	63	-44.1	77	90	10	17	122	170	-28.1
	Youth	36	44	-17.6	23	27	1	7	60	78	-23.1
	Total	929	948	-2.0	851	852	121	163	1,901	1,962	-3.1
Portage	Gun	212	220	-3.6	279	249	94	89	585	558	4.8
	Crossbow	454	392	15.7	383	390	93	103	930	885	5.0
	Longbow	161	135	19.0	185	179	38	40	384	354	8.5
	Bonus Gun	51	49	4.8	90	79	21	22	162	149	8.5
	Muzzleloader	34	32	7.4	48	71	13	17	95	120	-20.8
	Youth	44	14	207.0	72	11	12	2	128	27	374.1
	Total	1,018	902	12.9	1,179	1,064	306	297	2,503	2,263	10.6
Preble	Gun	108	115	-5.8	141	116	36	31	285	261	9.1
	Crossbow	167	146	14.6	142	127	37	29	346	302	14.7
	Longbow	93	90	3.0	84	82	17	20	194	192	1.2
	Bonus Gun	28	22	27.3	59	35	15	9	102	66	55.3
	Muzzleloader	15	17	-11.8	38	41	5	11	58	70	-16.7
	Youth	25	17	44.2	9	11	5	4	39	32	20.6
	Total	444	410	8.3	477	415	115	105	1,036	930	11.4
Putnam	Gun	123	118	4.5	143	133	41	37	307	288	6.7
	Crossbow	133	107	24.3	115	80	26	24	274	211	29.7
	Longbow	50	57	-12.3	64	55	15	8	129	120	7.2
	Bonus Gun	19	16	21.3	27	22	11	7	57	44	28.6
	Muzzleloader	12	8	50.0	7	13	2	2	21	23	-7.4
	Youth	27	18	47.3	12	13	9	3	48	34	39.8
	Total	371	327	13.5	372	319	106	82	849	728	16.6
Richland	Gun	387	457	-15.4	642	605	152	173	1,181	1,236	-4.4
	Crossbow	561	453	23.9	453	415	92	95	1,106	962	14.9
	Longbow	288	256	12.5	233	245	39	36	560	537	4.3
	Bonus Gun	83	71	16.9	171	129	38	30	292	230	27.1
	Muzzleloader	55	66	-16.2	114	156	29	27	198	249	-20.5
	Youth	56	46	20.9	34	37	18	10	108	93	15.7
	Total	1,439	1,361	5.7	1,662	1,600	368	374	3,469	3,335	4.0

# APPENDIX 1

## COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2019	3-year average	Diff. (%)	2019	3-year average	2019	3-year average	2019	3-year average	Diff. (%)
Ross	Gun	371	465	-20.3	536	525	90	98	997	1,089	-8.4
	Crossbow	528	434	21.7	336	281	56	46	920	762	20.8
	Longbow	284	297	-4.5	198	204	23	25	505	526	-4.0
	Bonus Gun	59	52	13.5	120	86	15	12	194	150	29.6
	Muzzleloader	58	89	-34.8	127	148	14	23	199	260	-23.6
	Youth	79	89	-11.2	42	35	9	10	130	134	-3.0
	Total	1,397	1,438	-2.9	1,368	1,288	209	218	2,974	2,944	1.0
Sandusky	Gun	128	89	44.4	98	109	20	38	246	236	4.2
	Crossbow	188	163	15.6	155	152	29	34	372	349	6.5
	Longbow	56	54	3.7	51	57	10	13	117	124	-5.9
	Bonus Gun	20	23	-14.3	33	37	5	7	58	67	-13.9
	Muzzleloader	12	17	-28.0	29	32	6	9	47	57	-18.0
	Youth	7	12	-43.2	13	7	6	3	26	22	16.4
	Total	414	362	14.4	390	398	76	105	880	865	1.7
Scioto	Gun	242	324	-25.3	369	439	56	90	667	853	-21.8
	Crossbow	369	375	-1.6	218	221	37	35	624	631	-1.1
	Longbow	240	254	-5.6	127	139	20	16	387	410	-5.5
	Bonus Gun	50	46	9.5	92	82	18	14	160	142	12.7
	Muzzleloader	39	65	-39.7	50	111	13	15	102	191	-46.6
	Youth	35	45	-21.6	35	28	6	8	76	80	-5.0
	Total	979	1,115	-12.2	901	1,026	150	178	2,030	2,320	-12.5
Seneca	Gun	287	316	-9.1	420	396	107	100	814	812	0.3
	Crossbow	325	243	33.9	236	177	57	44	618	463	33.4
	Longbow	96	97	-0.7	105	114	7	13	208	223	-6.7
	Bonus Gun	74	47	56.3	120	74	33	20	227	141	61.4
	Muzzleloader	25	33	-24.2	53	56	10	16	88	105	-16.2
	Youth	45	37	21.6	27	29	13	9	85	75	13.3
	Total	859	777	10.5	966	855	229	204	2,054	1,836	11.9
Shelby	Gun	152	120	27.0	200	168	36	49	388	336	15.4
	Crossbow	152	120	27.0	146	114	30	28	328	262	25.2
	Longbow	91	80	13.3	69	78	22	14	182	173	5.2
	Bonus Gun	29	19	50.0	45	34	18	9	92	62	48.4
	Muzzleloader	15	17	-13.5	40	40	4	8	59	66	-10.2
	Youth	23	23	-1.4	16	13	6	4	45	40	12.5
	Total	465	383	21.3	519	448	116	115	1,100	946	16.2

# APPENDIX 1

## COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2019	3-year average	Diff. (%)	2019	3-year average	2019	3-year average	2019	3-year average	Diff. (%)
Stark	Gun	295	298	-1.1	417	424	103	107	815	829	-1.7
	Crossbow	539	468	15.2	495	455	108	98	1,142	1,021	11.8
	Longbow	193	187	3.0	206	234	20	43	419	464	-9.6
	Bonus Gun	46	58	-21.1	127	119	29	26	202	203	-0.3
	Muzzleloader	46	51	-9.8	95	121	18	25	159	197	-19.2
	Youth	31	36	-13.9	35	19	12	10	78	65	19.4
	Total	1,159	1,112	4.2	1,392	1,387	297	314	2,848	2,812	1.3
Summit	Gun	60	61	-2.2	74	78	13	22	147	162	-9.1
	Crossbow	439	396	10.8	387	413	99	106	925	915	1.1
	Longbow	128	127	0.5	172	170	24	37	324	334	-3.1
	Bonus Gun	18	17	5.9	29	18	8	3	55	38	43.5
	Muzzleloader	11	9	22.2	19	21	2	6	32	35	-9.4
	Youth	2	6	-64.7	3	2	3	1	8	9	-7.7
	Total	661	621	6.5	687	708	150	175	1,498	1,503	-0.4
Trumbull	Gun	367	392	-6.4	579	587	171	190	1,117	1,169	-4.4
	Crossbow	718	562	27.8	569	522	178	164	1,465	1,248	17.4
	Longbow	168	176	-4.5	206	236	51	56	425	468	-9.2
	Bonus Gun	79	69	13.9	223	156	47	46	349	271	28.6
	Muzzleloader	36	43	-16.3	75	141	16	37	127	221	-42.4
	Youth	23	35	-33.7	44	27	15	14	82	75	9.3
	Total	1,434	1,330	7.8	1,738	1,737	496	528	3,668	3,596	2.0
Tuscarawas	Gun	678	763	-11.1	1,205	1,120	246	240	2,129	2,123	0.3
	Crossbow	921	699	31.8	683	560	114	97	1,718	1,356	26.7
	Longbow	442	383	15.3	414	358	38	43	894	785	13.9
	Bonus Gun	126	102	23.5	253	192	42	52	421	346	21.7
	Muzzleloader	81	125	-35.4	201	284	27	50	309	459	-32.7
	Youth	115	105	9.9	100	65	29	26	244	195	25.1
	Total	2,382	2,199	8.3	2,894	2,613	505	515	5,781	5,327	8.5
Union	Gun	127	126	0.5	142	139	29	35	298	301	-0.9
	Crossbow	168	129	30.6	115	108	28	22	311	259	20.2
	Longbow	98	85	15.7	82	94	18	19	198	197	0.3
	Bonus Gun	26	22	18.2	46	19	11	6	83	47	76.6
	Muzzleloader	10	20	-49.2	18	33	2	5	30	58	-48.0
	Youth	22	16	40.4	7	11	3	4	32	30	5.5
	Total	453	402	12.8	415	408	92	91	960	901	6.6

# APPENDIX 1

## COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2019	3-year average	Diff. (%)	2019	3-year average	2019	3-year average	2019	3-year average	Diff. (%)
Van Wert	Gun	109	93	16.8	97	87	24	22	230	203	13.3
	Crossbow	84	63	33.3	67	46	14	13	165	122	35.2
	Longbow	35	30	16.7	29	26	6	4	70	60	16.7
	Bonus Gun	18	17	3.8	16	22	1	5	35	44	-21.1
	Muzzleloader	9	9	0.0	9	12	1	4	19	25	-25.0
	Youth	13	12	5.4	7	8	6	3	26	23	11.4
	Total	271	228	18.7	228	202	54	53	553	483	14.5
Vinton	Gun	317	430	-26.3	499	557	84	105	900	1,092	-17.6
	Crossbow	421	348	21.0	271	226	36	41	728	615	18.3
	Longbow	228	235	-3.1	123	151	22	22	373	408	-8.7
	Bonus Gun	42	49	-14.9	91	81	14	14	147	144	2.1
	Muzzleloader	60	78	-23.1	106	156	23	22	189	256	-26.3
	Youth	44	50	-12.6	29	27	11	5	84	82	2.4
	Total	1,120	1,202	-6.8	1,127	1,205	192	210	2,439	2,616	-6.8
Warren	Gun	114	121	-5.5	145	118	27	31	286	269	6.3
	Crossbow	258	236	9.2	190	176	39	34	487	447	8.9
	Longbow	112	128	-12.3	116	110	22	22	250	259	-3.5
	Bonus Gun	25	16	56.3	48	30	6	7	79	53	48.1
	Muzzleloader	29	26	13.0	34	38	8	9	71	72	-1.8
	Youth	17	14	18.6	6	9	1	3	24	26	-7.7
	Total	564	544	3.7	544	484	105	107	1,213	1,135	6.8
Washington	Gun	574	602	-4.6	767	743	125	147	1,466	1,492	-1.7
	Crossbow	490	433	13.3	271	239	41	33	802	704	13.9
	Longbow	250	244	2.5	111	139	17	14	378	397	-4.9
	Bonus Gun	65	58	11.4	144	90	16	13	225	161	39.5
	Muzzleloader	84	123	-31.7	159	230	25	31	268	385	-30.3
	Youth	86	69	24.6	41	39	6	7	133	115	16.0
	Total	1,560	1,537	1.5	1,501	1,490	231	248	3,292	3,275	0.5
Wayne	Gun	264	256	3.0	448	382	89	110	801	748	7.1
	Crossbow	402	294	36.7	344	269	69	62	815	625	30.4
	Longbow	171	145	17.9	165	161	25	29	361	336	7.5
	Bonus Gun	63	39	60.2	98	78	18	20	179	138	30.0
	Muzzleloader	36	44	-18.2	74	102	12	21	122	167	-27.1
	Youth	52	37	40.5	36	22	18	9	106	68	55.9
	Total	995	824	20.8	1,183	1,030	233	255	2,411	2,109	14.3

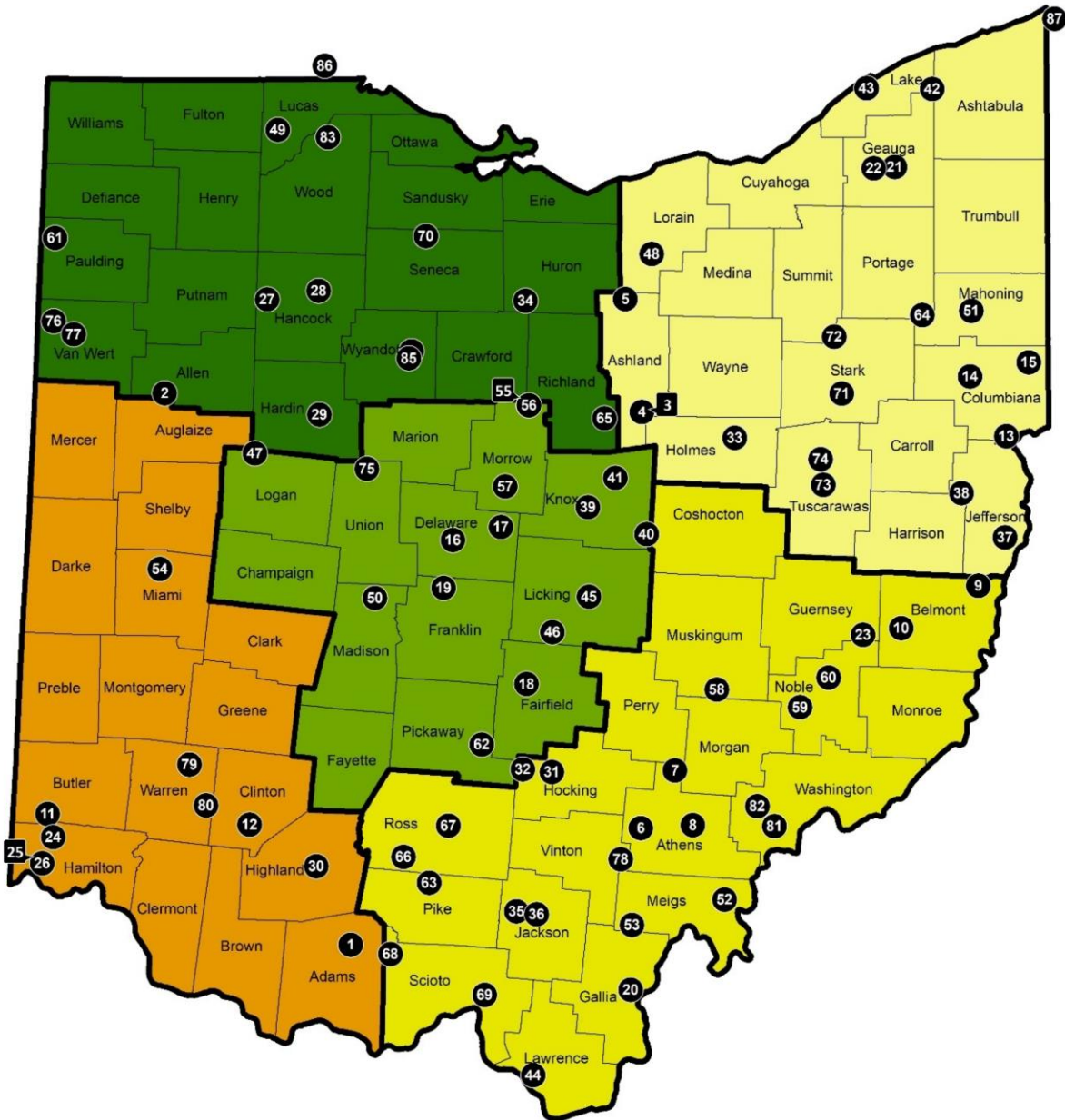
# APPENDIX 1

## COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2019	3-year average	Diff. (%)	2019	3-year average	2019	3-year average	2019	3-year average	Diff. (%)
Williams	Gun	272	261	4.2	282	291	70	77	624	629	-0.8
	Crossbow	280	209	33.8	211	166	31	35	522	411	27.0
	Longbow	117	140	-16.2	104	125	15	20	236	284	-17.0
	Bonus Gun	55	55	0.6	72	71	13	16	140	142	-1.6
	Muzzleloader	30	33	-8.2	42	49	8	13	80	95	-15.8
	Youth	22	18	20.0	18	10	4	5	44	33	32.0
	Total	784	722	8.5	734	721	142	170	1,660	1,613	2.9
Wood	Gun	145	142	2.4	157	128	31	30	333	300	11.0
	Crossbow	211	164	28.9	132	107	29	26	372	296	25.5
	Longbow	98	83	18.1	56	65	9	12	163	159	2.3
	Bonus Gun	20	24	-15.5	53	23	7	7	80	54	49.1
	Muzzleloader	17	17	2.0	27	23	3	5	47	45	3.7
	Youth	30	15	100.0	10	10	2	5	42	30	41.6
	Total	530	449	18.0	438	363	84	85	1,052	898	17.2
Wyandot	Gun	272	256	6.1	372	348	72	85	716	689	4.0
	Crossbow	177	142	24.9	140	124	23	23	340	289	17.8
	Longbow	102	107	-4.4	87	107	8	17	197	230	-14.5
	Bonus Gun	38	30	26.7	70	43	15	14	123	88	40.3
	Muzzleloader	20	30	-34.1	45	54	8	12	73	96	-24.0
	Youth	40	31	27.7	23	20	7	11	70	62	12.9
	Total	660	615	7.4	759	715	143	167	1,562	1,497	4.3

## APPENDIX 2

### Buckeye Big Buck Club Official Scorers



## APPENDIX 2

### Buckeye Big Buck Club Official Scorers

ID	COUNTY	NAME	CITY	PHONE
1	Adams	Bryan Smalley	Peebles	937-779-0180
2	Allen	William Bellman	Lima	419-303-8427
3	Ashland	Jon Byers	Loudonville	419-651-0501
4	Ashland	Lori Byers	Loudonville	419-908-5625
5	Ashland	Steve Reinhold	Nova	419-945-2848
6	Athens	Llyod Culbertson	Athens	740-664-5021
7	Athens	Bill Peneston	Glouster	740-646-5061
8	Athens	Mike Rex	Athens	740-594-7296
9	Belmont	Tom DeVaul	Bridgeport	740-310-0238
10	Belmont	Devin Stephen	Barnesville	740-827-1674
11	Butler	Dave Couch	Hamilton	513-738-8288
12	Clinton	Tony Feldheim	Miland	937-685-4965
13	Columbiana	Bill Lawrence	Wellsville	330-532-4259
14	Columbiana	Kerry Mora	Lisbon	330-222-1840
15	Columbiana	Ray Ward	New Waterford	330-501-0443
16	Delaware	Steve Bohan	Delaware	740-369-1763
17	Delaware	Dave Orndorf	Sunbury	740-965-5233
18	Fairfield	Tom Moore	Carroll	614-204-3334
19	Franklin	Rod Nutter	Columbus	614-439-2874
20	Gallia	Ron Tawney	Gallipolis	740-645-3099
21	Geauga	Dean Charvat	Burton	440-834-4926
22	Geauga	Roger Davis	Newbury	440-564-5092
23	Guernsey	Evan Hastings	Quaker City	740-679-2275
24	Hamilton	Michael Serio	Cincinnati	513-385-7094
25	Hamilton	Robert Wood	Cincinnati	513-604-2151
26	Hamilton	Jennifer Wood	Cincinnati	513-720-7406
27	Hancock	Jason Collert	Mt Cory	419-889-1700
28	Hancock	Robert Ebert	Findlay	567-525-4208
29	Hardin	Gary Oates	Kenton	419-673-0473
30	Highland	Tim Schlater	Hillsboro	937-403-5811
31	Hocking	Jeff Hill	Rockbridge	740-385-1780
32	Hocking	Ed McClure Jr	Laurelville	740-332-0266
33	Holmes	Mary Wilcox	Millersburg	330-674-1553
34	Huron	Bruce Buurma	Willard	567-227-0134
35	Jackson	David Haynes	Jackson	740-988-6278
36	Jackson	Seth Newkirk	Jackson	740-418-5011
37	Jefferson	Ken Bake	Mingo Junction	740-381-4820
38	Jefferson	Jim Williamson	Bloomington	740-543-4367
39	Knox	Adam Cramer	Mt Vernon	614-395-1004
40	Knox	Todd Fogress	Walhonding	740-485-3513
41	Knox	Ed Robinson	Howard	740-507-6722
42	Lake	Mike Irwin	Madison	440-622-5187
43	Lake	Mark McGrath	Mentor	440-352-0999
44	Lawrence	Mike Dickess	Ironton	740-532-0142
45	Licking	Steve Shannon	Newark	740-973-4784

## APPENDIX 2

### Buckeye Big Buck Club Official Scorers

ID	COUNTY	NAME	CITY	PHONE
46	Licking	Randy Weisenstein	Pataskala	740-739-1217
47	Logan	Gary Miller	Lakeview	419-238-6826
48	Lorain	Eric Ferron	Wellington	440-506-3540
49	Lucas	Steve Siegfried	Monclova	419-877-9096
50	Madison	Johnnie Eash	Plain City	614-203-5262
51	Mahoning	Dusty Briceland	Canfield	330-727-9888
52	Meigs	Ken Ritchie	Reedsville	740-985-4377
53	Meigs	Jack Satterfield	Langsville	740-742-0618
54	Miami	Westin Baker	Piqua	
55	Morrow	Frank Grauer	Galion	419-564-8133
56	Morrow	Chip Grauer	Galion	419-295-0096
57	Morrow	Shane Holtrey	Marengo	740-272-6103
58	Muskingum	Greg Smith	Blue Rock	740-607-6142
59	Noble	Michael Lewis	Caldwell	740-630-8894
60	Noble	Tom Smith	Sarahsville	740-732-5042
61	Paulding	Charles West	Antwerp	419-789-9622
62	Pickaway	Ron Elkins	Circleville	614-296-1199
63	Pike	Toby Williams	Waverly	740-947-7252
64	Portage	Jerry Weingart	North Benton	330-420-8859
65	Richland	Carter Quay	Lucas	419-564-4045
66	Ross	Wes Spradlin	Bainbridge	740-656-0785
67	Ross	JR Tucker	Chillicothe	740-779-0888
68	Scioto	Scott Hoffer	Rarden	740-372-2437
69	Scioto	Gene Peach	Portsmouth	740-876-4234
70	Seneca	Dennis Heilman	Tiffin	419-334-1560
71	Stark	Ralph Stephen	Canton	330-484-3191
72	Summit	Randy Pepper	N. Canton	330-499-4157
73	Tuscarawas	Michael Budd		740-973-1752
74	Tuscarawas	Brett Burrier	Dover	330-447-1437
75	Union	Mike Cline	Richwood	740-262-5982
76	Van Wert	Rob Miller	Convoy	419-203-5510
77	Van Wert	Rick Waltmire	Van Wert	419 203-8011
78	Vinton	John Ator	McAurthur	740-596-5252
79	Warren	Gary Trent	Waynesville	513-897-2117
80	Warren	Darin Woods	Clarksville	513-479-4111
81	Washington	Jim Hill	Vincent	740-293-9002
82	Washington	Ryan Huffman	Waterford	740-516-8078
83	Wood	Michael Thompson	Perrysburg	419-575-4429
84	Wyandot	Will Ogden	Upper Sandusky	419-561-1951
85	Wyandot	Steve Swihart	Upper Sandusky	419-294-5137
86		Bill Nash	Lambertville	734-847-0405
87		David Pasky	West Springfield	814-922-3043